Party Factions and Candidate Selection[*]

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Abstract

We study how political parties share power internally by analyzing the allocation of list positions to different factions. We develop a theory of intra-party bargaining in which list positions shape the mobilization efforts of party activists in different factions. Our results allow us to link observable patterns in list allocations to the importance of consensus in intra-party negotiations. We empirically evaluate these predictions using data from Norwegian municipal elections. We exploit a wave of municipal mergers to identify candidates' geography-based factional affiliations. In line with our theory's functionalist logic and consensus-based bargaining, smaller factions are over-compensated in both safe and contested list positions, but more so in safe positions. Our theoretical and empirical results show that parties can promote consensus among their factions while maintaining mobilization incentives, indicating that equality and efficiency within a political organization can be simultaneously achieved.

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1. Introduction

Political parties are not unified actors. Behind their electoral labels, parties are typically coalitions of factions that compete for influence, positions, and control over policy direction. Journalistic accounts regularly describe parties as arenas of internal bargaining and conflict rather than cohesive teams. A growing academic literature documents how factional disagreement shapes legislative behavior, leadership selection, and government formation (Leiserson, 1968; Proksch and Slapin, 2012; Spirling and Quinn, 2010; Ceron, 2012; Kölln and Polk, 2024).

Balancing factions' competing interests is a constant challenge. Parties routinely allocate scarce and valuable resources—such as candidate list positions, staffing resources, and leadership posts—that shape political careers and policy-making. How are these resources divided among competing internal groups? Do larger factions dominate internal allocations, or do parties adopt rules and norms that protect smaller groups? And how do these internal arrangements balance the need for cohesion with the need to motivate effort and mobilization?

This paper examines how parties share power internally by studying candidate list positions. We combine a theory of factional negotiations with new evidence on how parties allocate electorally valuable positions. The central insight is that not all political resources are alike: some some kinds of list positions primarily shape incentives for effort, while others primarily serve to maintain internal cohesion. This distinction yields testable implications on how faction size shapes the number and type of allotted list positions.

Despite the recognized importance of factions, the empirical study of intra-party power sharing is notoriously difficult. Internal allocation rules are rarely observable: beyond ministerial portfolios, researchers typically lack direct measures of how parties distribute rewards across factions. In addition, the empirical identification of factional affiliations is extremely challenging (Kitschelt, 1989; Greene and Haber, 2016; Kölln and Polk, 2024), due to the informal and fluid nature of factions and their lack of formal recognition in party statutes.

Our empirical setting—Norwegian municipal elections—allows us to overcome both challenges. A recent wave of municipal mergers creates observable, geography-based factions rooted in pre-merger local party organizations, while candidate list positions provide a direct measure of intra-party resource allocation. Leveraging this institutional context, we are able to map theoretical predictions about intra-party bargaining to concrete allocation decisions inside parties.

Following Kölln and Polk (2024), we define a faction as a subgroup of party members that collectively pursues a shared interest that is distinct from that of other members. Unlike demographic categories or voting blocs defined by shared traits or similarities in behavior, factions are organized subgroups within a party whose members can strategically coordinate their behavior in order to influence decisions over nominations, resources, and policy influence. In our empirical analysis, we focus on geography-based factions. Although intra-party disagreement is often theorized in ideological terms, geography is especially important in subnational politics, where parties compete over territorially targeted public goods and political representation. In our setting, municipal mergers transform pre-merger local party organizations into durable subgroups within a common post-merger party, giving factions both an organizational base and a common stake in local representation. Geography and ideology are therefore not competing logics here: territorial constituencies generate distributive priorities that map into policy preferences.

This focus is also consistent with how party organization and candidate selection operate in practice. Party organizations are typically structured along territorial lines, and nomination processes routinely incorporate concerns about local representation. In Norway, for example, candidates are balanced geographically within party lists (Valen, 1988; Fiva, Halse and Smith, 2021). More broadly, selectors themselves value local ties: evidence from Germany shows that party delegates reward incumbents who represent local interests and that geographically responsive politicians are more likely to be reselected (Rehmert, 2026). These patterns indicate that geographic considerations are not merely electorally salient, but are embedded in the internal logic of party decision-making. Geography-based factions therefore provide a natural and meaningful lens through which to study intra-party power sharing.

Our model studies how two factions of differing size—defined by the number of party activists they comprise—negotiate over a list of party candidates. Activists who belong to either faction exert costly mobilization efforts that enhance the party's expected electoral performance and thereby determine the total resources available to the party: strong performance yields a set of contested seats, while weaker performance secures only "safe" seats. Before exerting effort, factions bargain over the division of these resources—that is, the composition of the party list—which determines how many candidates each faction secures under each possible electoral outcome. These anticipated allocations shape activists' incentives to mobilize on behalf of the party.

A natural benchmark for these negotiations is a proportional allocation in which each faction's size equals its share of list positions. In addition to its adherence to a normative fairness criterion, this expectation is in line with the evidence on both intra-party portfolio allocation (Mershon, 2001*a*,*b*; Ennser-Jedenastik, 2013; Ceron, 2014) and *inter-party* coalition bargaining, where this phenomenon is known as Gamson's law (Gamson, 1961). These studies, however, analyze *ex post* allocations, i.e., negotiations occurring after the resolution of electoral uncertainty. In our setting, factions bargain *ex ante*: party list are chosen before the resolution of electoral uncertainty. This distinction matters because ex ante allocations shape mobilization incentives: the division of list positions determines how hard faction's activists will campaign, which in turn affects the party's overall performance.

Our model of list formation builds upon a long tradition in cooperative game theory: the Nash Bargaining framework (Binmore, Rubinstein and Wolinsky, 1986) abstracts from the specific rules governing negotiations and focuses on how outcomes are shaped by a single parameter, *bargaining power*. We interpret the larger faction's bargaining power as the degree of internal majoritarianism in party decision-making: in some parties, larger factions can impose outcomes close to their size, while in others, norms of consensus constrain majoritarian dominance. When bargaining power favors the larger faction, list allocations are majoritarian; when it favors smaller factions, negotiations are consensus-based, granting them influence disproportionate to their size.

Our analysis yields three key insights. First, contested seats that are contingent on strong electoral performance should be allocated to give larger factions a *smaller* share than their size alone would predict *regardless of a faction's bargaining power*. This under-compensation does not reflect fairness considerations or consensus norms, but efficiency: because larger factions suffer from more severe internal free-riding, shifting contested positions toward smaller factions maximizes aggregate mobilization effort. Efficiency thus requires deviations from proportionality.

Second, the allocation of safe seats should reflect factions' bargaining power, not efficiency rationales. Since safe positions do not affect mobilization incentives, their allocation is driven purely by distributional concerns. Under consensus-based negotiations, smaller factions wield disproportionate bargaining power, and it is more efficient for them to focus their demands on this margin—leading larger factions to receive an even smaller share of safe positions than of contested ranks. Under majoritarian negotiations, the pattern reverses. Comparing the allocation of safe versus contested ranks thus reveals whether intra-party negotiations are consensus-based or majoritarian.

Third, the patterns described above are reinforced by electoral stakes. When the stakes increase, the value of contested positions grows. Since efficiency leads to the over-compensation of smaller factions relative to their size, higher stakes magnify the value of this over-compensation. Under consensus-based bargaining, smaller factions leverage their position of strength to extract further concessions on the margin not disciplined by efficiency—safe positions. As a result, over-compensation of smaller factions in secure positions becomes *even more pronounced* when electoral stakes grow. Under sufficiently majoritarian bargaining, the same mechanism works in the opposite direction, with larger factions expanding their share of safe positions as stakes rise.

We test these predictions using data from Norwegian municipal elections, exploiting a wave of municipal mergers that makes geography-based factions observable within party organizations. We proxy faction size with pre-merger electoral support, a measure that is strongly correlated with local party membership and plausibly captures broader organizational strength. Using this measure, we show that smaller factions systematically receive more list positions than their size alone would predict. Consistent with consensus-based intra-party bargaining, this over-representation is concentrated in safe ranks, while allocations of contested ranks are closer to proportionality—as expected given the countervailing forces of efficiency and consensus norms.

We then examine how these patterns vary with electoral stakes. We exploit two sources of variation: differences in parties' likelihood of controlling key executive offices and a comparison between the high-stakes 2019 and lower-stakes 2023 elections. Across both dimensions, the same pattern emerges. Higher stakes amplify the over-compensation of smaller factions in safe positions; lower stakes push allocations toward proportionality.

Together, these findings show how intra-party power sharing responds systematically to electoral incentives. Efficiency considerations favor smaller factions in contested positions to mitigate free-riding, while the allocation of safe positions reflects underlying bargaining norms. Although these results build on familiar intuitions from Nash bargaining theory, to our knowledge they have not been formally derived, nor their implications have been applied to the study of party organizations. More broadly, our results speak to a long-standing view that parties face a fundamental tradeoff between internal cohesion and electoral effectiveness (Michels, 1915; Panebianco, 1988). We show instead that this tradeoff can be mitigated: by allocating different types of positions according to distinct logics, parties can sustain consensus among factions while preserving incentives for mobilization, especially when resources are highly contingent on electoral performance.

2. Related Literature

Our theory is based on the premise that parties are not monolithic entities, but are internally divided into competing factions. The formal literature has increasingly acknowledged the importance of factions to understand political parties' nomination processes (Caillaud and Tirole, 2002; Hirano, Snyder Jr and Ting, 2009; Crutzen, Castanheira and Sahuguet, 2010), legislative and government policymaking (Tsebelis, 2002; Cox and McCubbins, 2007) and intra-party power sharing (Persico, Pueblita and Silverman, 2011; Invernizzi, 2023; Invernizzi and Prato, 2025). Our theory's main contribution is to show that when factions bargain over resources contingent on electoral performance, efficiency—not fairness—shapes the allocation, favoring smaller factions to mitigate free-riding within larger ones. When instead resources are non-contingent and effort is not consequential, the allocation reflects factions' relative bargaining power.

A large empirical literature documents that political parties are internally divided and that intra-party frictions shape a wide range of political outcomes, from legislative behavior to executive governance and electoral competition (Proksch and Slapin, 2012; Spirling and Quinn, 2010; Ceron, 2012; Bäck, Debus and Müller, 2016). Within this tradition, existing work on factions has primarily examined national-level, non-electoral outcomes such as cabinet position and factions' seat shares in party councils (Leiserson, 1968; Mershon, 2001*a*,*b*), as well as ideological heterogeneity and dissent within parties (Ceron, 2019; Kölln and Polk, 2024). Much less is known about how intra-party bargaining unfolds in subnational party organizations and how it shapes candidate selection. We address this gap by studying geography-based factions within municipal party branches, a form of intra-party division that is empirically pervasive but rarely observed directly. Among the few existing studies at this level, Ennser-Jedenastik (2013) shows that smaller regional factions tend to be disadvantaged in the allocation of local executive portfolios. By contrast, we show that when candidate list positions are the object of bargaining, consensus-oriented intra-party norms can systematically lead smaller factions to be overcompensated in electorally valuable positions.

This contrast highlights a central distinction between our contribution and much of the existing literature on intra-party power sharing. Prior work has focused almost exclusively on the allocation of ministerial portfolios and other post-electoral offices (Leiserson, 1968; Mershon, 2001*a*,*b*; Kam et al., 2010; Ono, 2012; Ennser-Jedenastik, 2013; Ceron, 2014; Bäck, Debus and Müller, 2016). We instead study the allocation of candidates' list positions, which differ from portfolios in a crucial respect: list positions are assigned ex ante and cannot be renegotiated once electoral outcomes are realized. As a result, they simultaneously allocate power and shape incentives for mobilization. While Gamson's law provides a useful benchmark for post-electoral bargaining between parties (Gamson, 1961; Browne and Franklin, 1973), our analysis shows that intra-party list allocations display systematic deviations from proportionality. Importantly, these deviations are not arbitrary: they reflect the interaction between consensus-based intra-party norms and internal moral hazard in effort provision.

The strategic logic underlying these results connects our analysis to the literature on pre-electoral coalitions (Martin and Stevenson, 2001; Golder, 2006; Carroll and Cox, 2007;

Invernizzi, 2024). Closest to our argument is Carroll and Cox (2007), who show that pre-committing to proportional allocations of rewards can enhance collective mobilization, thereby reconciling efficiency and fairness. We extend this logic to intra-party factions, but also qualify it in an important way. Carroll and Cox treat parties as unitary actors, abstracting from internal organization. We unpack this assumption by modeling factions as groups of activists who can free-ride on each other's mobilization effort. Because free-riding is more severe in larger factions, proportional allocations are no longer efficient—instead, efficiency favors smaller factions in contested ranks. Safe positions, by contrast, reflect only bargaining power, so the gap between the two reveals intra-party norms.

Beyond the literature on intra-party power sharing, our paper also contributes to the study of candidate selection(Dal Bó and Finan, 2018; Cox et al., 2021; Matakos et al., 2024), which typically focuses on individual candidates or the party as a whole, rather than on factions. By studying groups of candidates sharing a geographic affiliation, our analysis uncovers inter-dependencies between the electoral fortunes of candidates within the same faction—a dimension of candidate selection that the individual-level literature abstracts away from.

A defining feature of our framework is that factions are organized along a territorial dimension. Geography provides a natural basis for factional organization in local politics, where party branches compete over resources with a strong spatial component. A large body of work documents that politicians, once elected, tend to prioritize their place of residence—a pattern observed across diverse political systems (Ansolabehere, Gerber and Snyder, 2002; Knight, 2008; Dragu and Rodden, 2011; Brollo and Nannicini, 2012; Fiva and Halse, 2016). In list-based PR systems, survey evidence indicates that many legislators prioritize the interests of their hometowns over those of their larger districts (André, Depauw and Martin, 2015). Recent work shows that politicians' geographic origins shape the allocation of public goods (Harjunen, Saarimaa and Tukiainen, 2023; Folke et al., 2024), but how such patterns emerge from intra-party bargaining remains unexplored.

3. Model

We study a party composed of n members who belong to one of two factions, $\mathcal{A}$ and $\mathcal{B}$. We denote by $\eta \in [1/2, 1]$ the relative size of faction $\mathcal{A}$, which is without loss of generality the larger faction.

Each member $m \in \mathcal{A} \cup \mathcal{B}$ exerts mobilization effort $e_m \geq 0$, which captures an array of campaigning activities aimed at increasing the party's electoral performance. Effort e is associated with a quadratic cost $C(e) = e^2/2$. Mobilization effort affects the party's electoral performance $\pi \in \{0, 1\}$, which can be high ($\pi = 1$) or low ($\pi = 0$). We model electoral success as the outcome of faction-level mobilization. Specifically, each faction $i \in \{\mathcal{A}, \mathcal{B}\}$ contributes to party performance according to a Cobb–Douglas aggregator implying constant returns to scale:

$$Q_i(\mathbf{e}_i) \equiv \prod_{m \in i} e_m^{\frac{1}{n_i}},$$

where n_i denotes the number of members in faction i (so $n_{\mathcal{A}} = \eta n$ and $n_{\mathcal{B}} = (1 - \eta)n$) and $\mathbf{e}_i = \{e_m\}_{m \in i}$ is the vector of efforts within faction i. Overall party performance equals

$$\Pr(\pi = 1) = \theta\big[Q_{\mathcal{A}}(\mathbf{e}_{\mathcal{A}}) + Q_{\mathcal{B}}(\mathbf{e}_{\mathcal{B}})\big], \tag{1}$$

where $\theta > 0$ captures the responsiveness of electoral performance to mobilization effort (relative to, for example, ideological considerations).

Under low performance, the party controls an amount of resources whose value is normalized to one. Under high performance, instead, the value of the party resources equals $1 + S$. Total party resources as function of party performance can then be written as $1 + \pi S$. The parameter S captures the *stake* of the election, i.e., the sensitivity of party resources to the electoral outcome.[1] Examples include (i) the number of contestable seats that the party only obtains conditional on a high electoral performance, (ii) staff positions that each elected official can control, (iii) the amount of discretionary spending that parties can direct, and (iv) increased access to executive positions (e.g., the mayor).

[1] The parameter S could also be interpreted as the level of ideological disagreement among different parties.

Before their members exert effort, factions negotiate over a contingent division of party resources. This allocation determines, for instance, how party lists are filled. Formally, a division rule specifies a pair (x_i^0, x_i^S), where (i) $x_i^0 \in [0,1]$ is the share of faction i's resources under low electoral performance and (ii) $x_i^S \in [0,1]$ is the share of faction i's additional resources under high electoral performance.[2] Since all party resources are divided between the two factions, the resources allocated to factions $\mathcal{A}$ and $\mathcal{B}$ are then, respectively $x_{\mathcal{A}}^0 + x_{\mathcal{A}}^S \pi S$ and $(1 - x_{\mathcal{A}}^0) + (1 - x_{\mathcal{A}}^S)\pi S$.

Party members value resources allocated to their own faction more than those allocated to the other faction. To capture this idea in its simplest form (but without loss of generality), we assume that they *only* value resources allocated to their own faction. In Appendix A, we relax this assumption and consider a more general version of the model with an arbitrary number of factions whose members value party resources *independently* of their own faction's ability to appropriate them (in line with the idea of ideological motivations), and show that our results generalize to this setting.

Formally, the payoff of member m belonging to faction $i \in \{\mathcal{A}, \mathcal{B}\}$ who exerts effort e under division $\mathbf{x} = (x_{\mathcal{A}}^0, x_{\mathcal{A}}^S)$ and party performance π is given by:

$$u_m(e, \mathbf{x}, \pi) = x_i^0 + x_i^S \pi S - C(e). \tag{2}$$

Finally, we assume that the division rule $\mathbf{x} = (x_{\mathcal{A}}^0, x_{\mathcal{A}}^S)$ is negotiated by a representative member of each faction via (generalized) Nash Bargaining (Nash, 1950). Let $V_i(\mathbf{x})$ denote the average expected payoff of faction i's members from (a subgame beginning after the choice of) a division rule $\mathbf{x}$:

$$V_i(\mathbf{x}) = \sum_{m \in i} \mathbb{E}_\pi \{u_m(e_m(\mathbf{x}), \mathbf{x}, \pi)\}, \tag{3}$$

where $e_m(\mathbf{x}) = \arg\max_e \mathbb{E}\{u_m(e, \mathbf{x}, \pi)\}$. The Nash Bargaining solution $\mathbf{x}$ solves

$$\max_{\mathbf{x}} V_{\mathcal{A}}(\mathbf{x})^\alpha V_{\mathcal{B}}(\mathbf{x})^{(1-\alpha)}. \tag{4}$$

[2] This quantity maps into the share of 'contested' ranks on party lists, which is one of our key empirical quantities.

The *bargaining weight* α captures, in a stylized way, the negotiating power of faction $\mathcal{A}$. In practice, these weights might reflect different rules of deliberation (e.g., simple majority vs unanimity), outside options, and norms of fairness. When $\eta = \alpha$, factions' bargaining power is proportional to their size, and we refer to this as *proportional negotiations.* We refer to the case of $\alpha > \eta$ as *internal majoritarianism*, since the larger faction's influence is larger than its size. We refer to the case of $\alpha < \eta$ as *consensus-based negotiations*, since the smaller faction's influence on the division rule is higher than its size would predict. We model negotiations using Nash bargaining, which allows us to abstract from specific bargaining protocols while relying on well-known results showing that the Nash bargaining solution emerges in a broad class of non-cooperative bargaining environments (Rubinstein, 1982; Binmore, Rubinstein and Wolinsky, 1986).

Timing unfolds as follows: (1) factions negotiate over a division of resources $\mathbf{x}$; (2) each party member decides how much effort to exert; and (3) the party's electoral performance is realized and resources are allocated according to $\mathbf{x}$.

We study Subgame Perfect Nash Equilibria (SPE). Since we did not impose an exogenous upper bound on effort choices, we use θ to ensure that the probability of $\pi = 1$ is interior:

Assumption 1. *The parameter θ satisfies*

$$\theta \leq \frac{1}{S}\left(\frac{1}{n_{\mathcal{A}}} + \frac{1}{n_{\mathcal{B}}}\right)^{-1}.$$

4. Theoretical results

We begin by characterizing individual members' mobilization effort, taking the division rule $\mathbf{x}$ as given. Because members within a faction are ex ante identical—facing the same costs, preferences, and marginal impact on electoral performance—they solve identical optimization problems. Moreover, concavity implies that there exists a unique equilibrium effort level and it is in symmetric within each faction. Accordingly, with a slight abuse of notation, we denote by $e_i(\mathbf{x})$ the equilibrium effort exerted by a representative member of faction $i \in \{\mathcal{A}, \mathcal{B}\}$. See Appendix A for the proofs.

Lemma 1. *Fix a division rule* $\mathbf{x} = (x^0_{\mathcal{A}}, x^S_{\mathcal{A}})$. *In any SPE, we have:*

$$e_i = \frac{\theta x^S_i S}{n_i}.$$

Lemma 1 highlights two central features of mobilization incentives in the party. First, equilibrium effort depends exclusively on the share of *contingent* resources, x^S_i, and is independent of the allocation of safe resources, x^0_i, which do not affect marginal incentives. Second, individual effort is diluted by faction size: holding a faction's share of the stake constant, members of a larger factions suffer from a more severe free-rider problem.

4.1 *Optimal division of the stakes*

What division rule should we expect factions to adopt? We begin by deriving the scheme that maximizes the joint payoff of the factions, $W(\mathbf{x})$. Substituting equilibrium efforts into $V_i(\mathbf{x})$ we obtain

$$V_{\mathcal{A}}(\mathbf{x}) = x^0_{\mathcal{A}} + \Pi(\mathbf{x}) x^S_{\mathcal{A}} S - \frac{[\theta x^S_{\mathcal{A}} S]^2}{2n^2_{\mathcal{A}}}, \tag{5}$$

$$V_{\mathcal{B}}(\mathbf{x}) = 1 - x^0_{\mathcal{A}} + \Pi(\mathbf{x})(1 - x^S_{\mathcal{A}}) S - \frac{[\theta(1 - x^S_{\mathcal{A}}) S]^2}{2n^2_{\mathcal{B}}}. \tag{6}$$

where $\Pi(\mathbf{x}) = \theta\big[Q_{\mathcal{A}}(e_{\mathcal{A}}(\mathbf{x})) + Q_{\mathcal{B}}(e_{\mathcal{B}}(\mathbf{x}))\big]$. Our first result characterizes the division of performance-contingent resources that maximizes the factions' joint payoff, $W(\mathbf{x}) = V_{\mathcal{A}}(\mathbf{x}) + V_{\mathcal{B}}(\mathbf{x})$. In particular, the efficient allocation assigns the larger faction a weakly smaller share of the contested stake than its size.

Lemma 2. *Any division rule maximizing* $W(\mathbf{x}) = V_{\mathcal{A}}(\mathbf{x}) + V_{\mathcal{B}}(\mathbf{x})$ *satisfies* $x^S_{\mathcal{A}} \leq \eta$. *Moreover, if* $\eta \in (1/2, 1)$ *and* $n > 1$, *then* $x^S_{\mathcal{A}} < \eta$.

Because individual effort is diluted by faction size ($e_i = \theta x^S_i S / n_i$), a unit increase in the performance-contingent share allocated to a faction generates more aggregate mobilization when it is assigned to the smaller faction. The reason is that the smaller faction converts incentives into effort more efficiently due to a weaker free riding problem. The share of contingent resources $x^S_{\mathcal{A}}$ which maximizes joint-surplus therefore shifts some of the contested stake away from strict proportionality: it assigns the larger faction a weakly smaller share than its size ($x^S_{\mathcal{A}} \leq \eta$), with a strict inequality whenever the solution is interior.

A direct implication of Lemma 2 is that any division rule that assigns the larger faction more than a proportional share of the performance-contingent stake is Pareto dominated. The next result shows that we can rule out such allocations in equilibrium:

Proposition 1. *Any division rule* $\hat{\mathbf{x}}$ *with* $\hat{x}^S_{\mathcal{A}} > \eta$ *cannot be part of an equilibrium.*

4.2 *Optimal division of safe rewards*

How do factions negotiate over safe rewards (i.e., $x^0_{\mathcal{A}}$)? Our analysis reveals that in this case the bargaining weight α plays a crucial role.

Proposition 2. *There exists* $\alpha^* < \eta$ *such that* $x^0_{\mathcal{A}} < x^S_{\mathcal{A}}$ *iff* $\alpha < \alpha^*$.

Proposition 2 highlights a sharp contrast between the allocation of contingent and safe resources. Performance-contingent rewards affect aggregate mobilization by shaping individual effort incentives and are therefore disciplined by efficiency considerations. Safe rewards, instead, do not influence effort and serve a purely distributive role in bargaining.

When bargaining power is sufficiently tilted toward the smaller faction (i.e., under consensus-based negotiations with $\alpha < \alpha^*$), the larger faction concedes relatively more on safe rewards than on contingent ones, leading to $x^0_{\mathcal{A}} < x^S_{\mathcal{A}}$. As bargaining power shifts toward the larger faction, this pattern reverses: safe rewards increasingly reflect bargaining strength rather than efficiency, and the larger faction secures a disproportionately large share of them. This produces the following:

Empirical Implication 1. *Under consensus-based bargaining rules, minority factions should receive a larger share of safe positions than of performance-contingent positions. Conversely, under majoritarian bargaining rules, the majority faction's advantage should be more pronounced in the allocation of safe positions.*

In the empirical analysis, we therefore compare the degree of proportionality in the allocation of safe and performance-contingent positions within parties. Finding that minority factions are relatively over-represented in safe positions, but less in contested ones, is consistent with power-sharing arrangements characterized by consensus-based bargaining.

4.3 *The effect of higher stakes*

We conclude our analysis by studying how the stakes of the election affect the equilibrium division rule. Recall from the previous sections that the performance-contingent share $x_{\mathcal{A}}^S$ is pinned down by efficiency and does not depend on S, whereas the allocation of safe rewards $x_{\mathcal{A}}^0$ is determined by Nash bargaining and may respond to changes in S.

Proposition 3. *Whenever $\alpha \leq x_{\mathcal{A}}^S$, $x_{\mathcal{A}}^0(\alpha)$ decreases in S.*

Increasing the electoral stakes S scales up the magnitude of the surplus created by mobilization and, crucially, the distributive tension generated by the fact that performance-contingent rewards are allocated according to efficiency rather than bargaining power. Because $x_{\mathcal{A}}^S < \eta$, higher stakes increase the value of the contingent component in a way that favors the smaller faction in relative terms. When bargaining power is sufficiently tilted toward the larger faction (high α), the larger faction can appropriate additional concessions on the only efficiency-neutral margin—safe rewards—, and $x_{\mathcal{A}}^0$ rises with S. Conversely, it is only when bargaining power is sufficiently tilted toward the smaller faction (low α) that this strengthened position translates into additional safe rewards, so that $x_{\mathcal{A}}^0$ falls with S. This produces the following:

Empirical Implication 2. *Under consensus-based bargaining rules, the gap between minority representation in safe versus contingent positions should widen with S.*

Accordingly, in the empirical analysis we test whether the difference between (i) minority factions' representation in safe positions and (ii) their representation in performance-contingent positions increases in high-stakes electoral environments, particularly in settings characterized by consensus-based internal bargaining.

5. Empirical Setting

We evaluate the implications of our theory using data from local municipal elections in Norway. Before outlining our empirical strategy, we first describe key features of the institutional context and review evidence that its defining characteristic—geographically based factions in local elections—is both widespread and politically consequential across advanced democracies.

5.1 *Norwegian municipalities*

Norwegian municipalities are tasked with important spending decisions that account for approximately 18 percent of GDP. Spending is concentrated in sectors characterized by a pronounced geographic dimension: municipal governments manage the operation of schools, day care centers, and elderly care facilities, and they manage local public goods including road maintenance (see Appendix Figure B.1).

Municipalities face national regulations concerning coverage and standards of service delivery, but have considerable discretion concerning the composition of expenditures. The revenue side is considerably more restricted.[3]

5.2 *Municipal Merger Reform*

Municipalities vary dramatically in size, from only a few hundred inhabitants, to the capital, Oslo, with more than 700,000 inhabitants (as of 2023). In 2013, Norway had 428 municipalities with a median population size of 4,620 (average: 11,802).

Expert evaluations have consistently warned over the years that many municipalities are too small to handle their significant responsibilities (Vabo et al., 2014). Increasing rural-urban migration and associated demographic shifts have accentuated this problem in recent years.

In 2014, the right-wing national government initiated a municipal merger reform process, which was voted by parliament on June 9, 2015. Mergers were to be encouraged through various means, including government appeals, merger subsidies, and adjustments to the governmental grants scheme. The municipalities were advised to consult their citizens via consultative referendums or citizen surveys.[4]

Municipalities were encouraged to work together to submit merger applications, with two key deadlines in place. Applications submitted by February 2016 were set to take effect in January 2018. These new municipal councils were appointed through amalgamation of

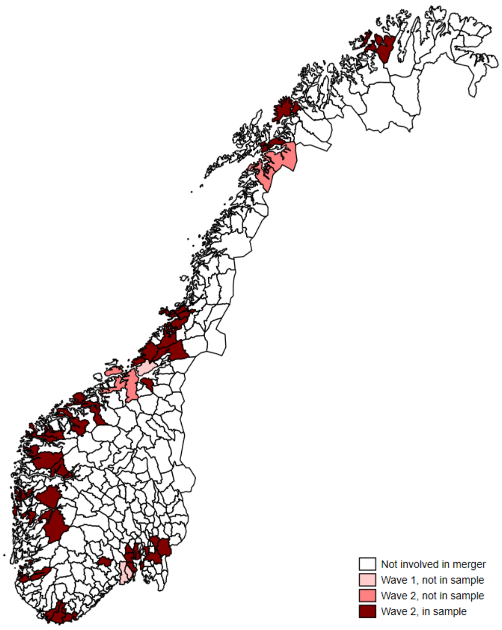
[3]Most of the municipalities' income derive from regulated income taxation and block grants provided by the central government. The municipalities do, however, have discretion to levy property taxation and set user fees for the services they offer.

[4]About half of the existing municipalities held local consultative referendums about possible municipal mergers. In general, local councils largely aligned with the outcomes of the consultative referendums. In 87% of the cases where the majority rejected amalgamation, the local council also opted against it. Conversely, in cases where there was a majority in favor, 86% of the local councils decided in favor of the amalgamation (Folkestad et al., 2021).

the old councils or through extraordinary elections. Conversely, applications filed by July 2016 would see the mergers implemented in January 2020. Our analysis focuses on this latter group, as these municipalities conducted their inaugural local elections under the new municipal configurations in the ordinary local elections on September 9, 2019.[5]

Figure 1 presents a map highlighting the municipalities that merged between 2017 and 2020, a period during which the total number of municipalities decreased from 428 to 356.[6,7] For detailed information on each merger case, see Appendix Table B.1.

Figure 1 – Map of Norwegian municipalities by merger status.



Note: This map displays the 2020 configuration of Norwegian municipalities following the municipal merger reform. The first wave of mergers occurred on January 1, 2017, or January 1, 2018, while the second wave, which is the primary focus of our empirical analysis, took effect on January 1, 2020. The map identifies five 'wave 2 mergers' where old municipalities were split into two or more new entities. These mergers are not part of our estimation sample. For detailed information on each merger case, see Appendix Table B.1.

[5]The newly elected councils started meeting before the year-end, although the new municipalities were not in effect until January 1, 2020. The councils of the pre-mergers continued to perform basic functions until December 31, 2019.

[6]Among the 43 mergers effective from January 1 2020, five involved the division of old municipalities among two or more new ones (in Figure 1, these are indicated as Wave 2, not in sample). Because these municipalities originated from splits rather than mergers, a faction would be identified as a post-split municipality rather than a pre-merger one. We exclude these observations as they would be qualitatively different from the factions we have in sample.

[7]As the process primarily relied on voluntary mergers, the reform was less extensive than the right-wing government had hoped for. While 33 mergers were voluntary, another ten were mandated by Parliament on June 8, 2017, despite not having the support of all participating entities.

5.3 *Electoral System and Party Organization*

Norwegian local elections, where each municipality forms a single electoral district, are held every fourth year on the second Monday of September. However, preparations begin up to a year in advance, involving a closed and non-standardized nomination process within each local party organization. Typically, the party appoints a nomination committee responsible for organizing the selection process and proposing a list to a formal nomination meeting consisting of party members. Consequently, the final ballot reflects intra-party negotiations rather than unilateral decisions by the party leadership. In the 2019 mergers, these nomination committees consisted of representatives from the different pre-merger parties (Bakke and Folkestad, 2021).

The flexible-list election system provides political parties with important tools for orchestrating political selections. Specifically, the electoral law allows parties to give certain candidates a *head start* by increasing their personal vote-share with an additional 25% of the total number of votes received by the party. Such candidates are listed at the top of the ballot paper in boldface (see the example ballot in Appendix Figure B.2).

Local party organizations have the flexibility to determine the number of advantaged positions, ranging from zero to the maximum allowable, based on the size of the council.[8] Appendix Figure B.3 displays the distribution of advantaged candidates per list, divided into panels based on the applicable maximum. For the vast majority of party lists, the restriction is not binding. In the 2019 local elections the median number of advantaged candidates is two. However, it is worth noting that there is considerable variation across municipalities and over time, as highlighted in Fiva, Izzo and Tukiainen (2024).

During the voting process, voters are required to choose a party list and, if they wish, indicate their preferences for individual candidates by marking checkboxes on the party lists. Voters have the option to give preference votes to as many candidates as they like.

The advantage that parties can assign is so substantial that it is exceedingly difficult for non-advantaged candidates to compete with those that have the advantage. In 2019, only 2%

[8]In councils with fewer than 23 members, parties can give an advantage to a maximum of 4 candidates. For councils with 23 to 53 members, the maximum is 6, and for councils with more than 53 members, 10 is the limit.

of non-advantaged candidates received personal votes amounting to 25% of the total number of votes received by the party, which is the *minimum* to overtake a candidate with a head start. In fact, only 0.2% of non-advantaged candidates outperformed candidates with a head start (excluding open lists) (Fiva, Izzo and Tukiainen, 2024).

At the beginning of each election period, the local council elects an executive board and a mayor.[9] The mayor presides over the executive board and is typically the only full-time politician on the council.

5.4 *Party System Features*

Both local and national politics are dominated by seven major parties: the Socialist Left Party and Labor Party on the left; the Center Party, Christian People's Party, and Liberal Party in the center; and the Conservative Party and Progress Party on the right. Smaller parties, joint lists, and local lists also compete in some municipalities. The Labor Party, the Center Party, and the Conservatives have the largest local organizations and, in 2015, ran in 99%, 90%, and 89% of municipal elections, respectively, while the other main parties competed in about two-thirds of municipalities. In contrast, all seven parties ran in every municipality in the 2017 national election.[10] We exploit the universal participation in the 2017 national election in Section 6.

5.5 *Geography-based Factions*

We identify factions within post-merger parties using candidates' municipality of residence prior to the merger. While our theoretical framework can accommodate alternative factional cleavages (e.g., ideology), geography is the dominant and most substantively relevant dimension in our empirical setting, and one that plausibly extends to many other real-world contexts. We argue that these geography-based groups satisfy our definition of a faction, as they share a distinct stake in locally targeted public goods and political representation,

[9]Local council sizes vary, ranging from 11 to 77 members, with a median size of 23. Municipal population size sets a lower limit for council size, although this appears not to matter much since few municipalities are at this lower limit.

[10]The municipalities are organized within 19 counties, which also served as electoral districts during the 2017 national election. See Appendix Table B.2 for descriptive statistics on parties' participation rates and vote shares in the 2015, 2017, and 2019 elections.

recognize this stake, and have the organizational capacity to collectively pursue it. This claim rests on four empirical considerations.

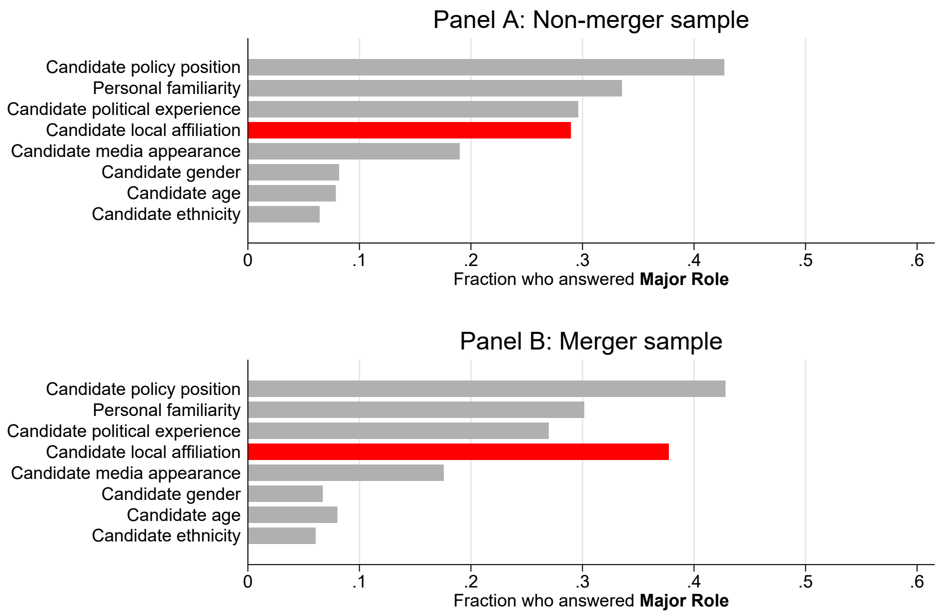
First and most directly, *pre-merger parties constituted genuine bargaining units during the nomination process.* Before the reform, pre-merger municipalities were autonomous political units with separate party organizations, candidate lists, and council groups. Bakke and Folkestad (2021) document that these organizations often continued to exist during the 2019 nomination process, and that parties consistently sought to have representation from all the pre-merger municipalities on their nomination committees. The geographic factions we study thus had both the organizational basis and the institutional standing to act collectively during the nomination process.

Second, *pre-merger municipal origin structures post-merger political conflict.* Municipal mergers systematically reallocate public services toward larger merger partners (Harjunen, Saarimaa and Tukiainen, 2021), generating distributive stakes that vary sharply across pre-merger units. Voters respond through geographically strategic voting (Saarimaa and Tukiainen, 2016), while local politicians exhibit strong geographic biases in fiscal policy prior to mergers, consistent with free-riding incentives under shared post-merger budgets (Hinnerich, 2009; Saarimaa and Tukiainen, 2015; Askim, Houlberg and Klausen, 2023). These patterns indicate that pre-merger factions share a distinct and consequential stake in political outcomes within post-merger party politics.

Third, *voters perceive and value the spatial dimension of local representation.* Evidence from the 2019 Norwegian Local Election Survey shows that voters take candidates' geographic ties into account when casting preference votes. As shown in Figure 2, local affiliation ranks among the most important candidate attributes—fourth in non-merging municipalities and second in merging ones, suggesting that members of geographic factions recognize their shared stake as politically relevant.

Fourth, *institutional features make geography directly actionable at the ballot.* Parties may list candidates' place of residence, and over two-thirds of ballots in merging municipalities

Figure 2 – Survey evidence on decision to cast a personal vote.



Note: The figure plots the fraction of survey respondents that indicate that the candidate attribute in each row played a major role in their decision to cast a personal vote. The other response categories are 'some role', 'no role' and 'don't know'. The exact wording of the 'local affiliation' category in the survey is: "the candidate's affiliation to a specific part of the municipality." Results are displayed for respondents living in a municipality in our merger sample (N=462) and in a non-merging municipality (N=1091). The data is from the 2019 Norwegian Local Election Survey (N=4240), and the sample is restricted to respondents reporting to have cast a personal vote in the 2019 election.

include this information in both 2019 and 2023 (Appendix Figure B.4).[11] In practice, residence is often reported at the level of pre-merger municipalities or neighborhoods, enabling voters to express geographically targeted preferences and reinforcing the incentive for geographic factions to act collectively.

6. Empirical Strategy

6.1 *Data*

To test our predictions of intra-party power sharing, we study parties' allocation of list positions in merging municipalities in the 2019 local election. Our focus is on the seven main parties, who dominate local and national politics and were all established at least 50 years ago. We have data on the universe of candidates running for office, including information

[11] We should emphasize that our identification of candidates' factional affiliation is based on administrative records, and not on the information listed on the ballot.

on party, the municipality in which they stand for election, list rank and 'head start' status. Each candidate is matched with the administrative registers of Statistics Norway to identify their place of residence. A candidate is considered to be affiliated with a given faction if they were registered as residing in that pre-merger municipality as of January 1, 2019.[12]

Our starting sample consists of 8680 candidates running for office in 38 merging municipalities.[13] Each merger municipality consists of between two and five pre-merger municipalities, with a mean of 2.6. Out of the seven main parties, on average four stand for election in a given merger. The unit of observation is a municipality-list-faction ($N = 658$), i.e., a faction within the municipality branch of a party.

The size of a faction is measured in terms of its electoral support in the 2017 national election, relative to the other factions in the merger. The size of faction i in party p within the post-merger municipality m is given by:

$$Size_{ipm} = \frac{Vote_{ipm}}{\sum_{i \in m} Vote_{ipm}}, \tag{7}$$

where $Vote_{ipm}$ is the number of votes of faction i. In addition to conveying information about the faction's voter potential, we argue that this measure reflects various aspects of its influence, such as party membership, organizational strength and campaigning capabilities. The correlation between 2017 votes and local party membership is very high, as evidenced by Appendix Table B.3. We use voting data from the 2017 national level election, as all seven parties participated in this election in all pre-merger municipalities.[14]

[12]A potential concern could be that candidates decide to move to another municipality after a merger is announced. Our results are robust to excluding candidates who move into their pre-merger after January 1, 2014.

[13]We exclude from our sample one candidate without a match in the residency registry, and 83 candidates who move into the merger between January 2, 2019 and the election on September 9, 2019, as it is not possible to identify their factional affiliation. We also exclude 834 candidates from mergers which include municipalities that were split between two or more mergers (Heim, Hitra, Orkland, Narvik and Hamarøy, see Figure 1). We further exclude 163 candidates from 8 open lists, since parties with open lists do not make a distinction between 'safe' and 'contested' positions.

[14]An alternative measure of faction size would be their population share. Appendix Figure B.5 illustrates the relationship between factions' relative contribution to the party's votes and their population share. The two measures are closely related, with a correlation of 0.97.

We classify list positions as 'safe', 'contested' and 'hopeless' based on their advantage status and rank percentile. List positions are deemed 'safe' if they receive the discretionary 25% boost in personal votes by the party. In our merger sample, 84% of these candidates are ultimately elected (Appendix Figure B.6). Safe candidates constitute 10.6% of the overall sample.

It is not obvious where we should set the cut-off between 'contested' and 'hopeless' positions. In our baseline analyses, we classify non-advantaged candidates in the top 30% of the list, excluding advantaged candidates, as contested (25.1% of the sample, of which 22% are ultimately elected).[15] We will demonstrate below that the cutoff point does not significantly impact our findings.

To analyze how allocations of list positions vary with the stakes of the election, we consider the party's probability of securing the mayoralty in the post-merger municipality. Often the only full-time politician in a municipality, the mayor plays a key role in the local council. The position is typically awarded to the largest party in the election.[16] We anticipate a party to be in competition for the mayoral position if it ranked among the top-two parties in the previous election. For our merger sample, we predict a party's likely top-two status by aggregating votes from the 2015 election in the pre-merger municipalities.[17]

6.2 *Empirical Specification*

Our baseline empirical specification is a linear regression model of the form:

$$Y^l_{ipm} = \lambda^l_{pm} + \beta^l_1 Size_{ipm} + \epsilon^l_{ipm}, \tag{8}$$

where Y^l_{ipm} denotes the share of list positions held by faction i from party p in the post-merger municipality m. This model is separately estimated for two categories of list positions l: 'safe', and 'contested'. $Size_{ipm}$ is the relative size of faction i, given by equation (7), and β^l_1 is the parameter of interest. We include local party fixed effects λ_{pm} ensuring that inference

[15]Even though the initial ranking on the party list does not formally play any role (except as a tie-breaker), there is a strong tendency that higher ranked candidates are more likely to get elected (Appendix Figure B.6).

[16]After the 2019 election, around 75% of mayors were from the largest party.

[17]In our sample, 83.5% of the predicted top-two parties were realized as a top-two party in the 2019 election.

is drawn from a comparison of factions competing for positions on the same ballot. ϵ^l_{ipm} is an error term. We cluster standard errors at the post-merger municipality level.

We extend our baseline model by adding controls in some specifications. Specifically, we control for the faction's number of incumbent councilors on the list and whether it has an incumbent mayor running, as experienced candidates may excel in intra-party bargaining or be more valuable for campaigning and governing. Geographic distance—measured as driving time in minutes between town halls—between partner municipalities is included as a proxy for personal relationships, which may influence power-sharing. We also control for the pre-merger urban population share to account for the need to represent widely dispersed populations. Finally, we control for candidate characteristics such as the shares of women, young (under 30), and highly educated candidates.

To study how allocations of list positions vary with the stakes of the election, we expand our baseline model to include an interaction of our measure of stakes with faction size. We estimate a model where the election stakes are captured by the party's probability of obtaining the mayor:

$$Y^l_{ipm} = \lambda^l_{pm} + \gamma^l_1 Size_{ipm} + \gamma^l_2 Size_{ipm} \times TopTwoParty_{pm} + \xi^l_{ipm}, \tag{9}$$

where $TopTwoParty_{pm}$ indicates whether party p is predicted to be among the two parties with the highest electoral support in post-merger municipality m.

As a complement to this party-level approach, we turn to data from the second election following the municipal reform, where the stakes were arguably lower than in the election directly after the reform. Appendix Figure B.7, based on data from the Norwegian Local Election Surveys, illustrates the percentage of respondents over time who believe that the municipal election outcomes will significantly influence their municipality over the next four years, disaggregated by merger status. The results show that respondents from merging municipalities perceived higher stakes in the 2019 election compared to 2023.

7. Results

7.1 *Allocation of List Positions*

In Figure 3, we non-parametrically plot the expected share of positions conditional on faction size, employing locally weighted scatterplot smoothing. Consider first Panel A, which displays the allocation of 'safe' list positions. We observe that smaller factions, specifically those that contribute with less than about 40% of the party's votes, tend to get more than their relative size (red dashed line).[18] Bigger factions, on the other hand, tend to get a smaller share of safe positions than their relative size dictates.

In Panel B, which illustrates the allocation of 'contested' list positions, we again observe that smaller factions are over-represented relative to their size, but the gap between the allocation and the proportional benchmark is smaller than for safe positions.[19] This pattern is consistent with our theoretical predictions (see Empirical Implication 1): smaller factions are over-compensated in both types of positions, but more so in safe ranks where only bargaining power matters. The closer-to-proportional allocation of contested ranks reflects the countervailing forces of efficiency—which favors smaller factions—and consensus norms, which push in the same direction but are partially offset by the efficiency constraint. Overall, these results suggest that consensus-based norms play an important role in intra-party negotiations.

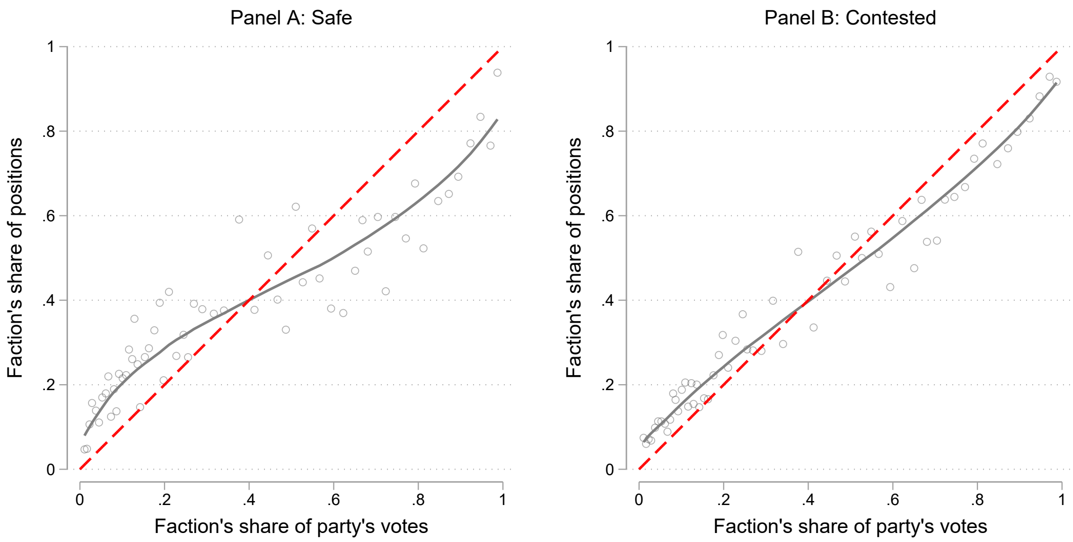
In Table 1, we present our main results in a regression framework. Columns (1) and (5) provide the results from simple linear regression models capturing the bivariate relationship between a faction's share of list positions and its share of the party's votes. As we have already seen in Figure 3, there is a marked difference in the allocation of safe and contested candidate positions.[20]

[18] 98.3% of the biggest factions have more than 40% of the votes and 95.2% have more than 50% of the votes.

[19] Panel A of Appendix Figure B.8 provides the corresponding plot for 'hopeless' list positions, where the estimated relationship adheres more closely to the proportional benchmark. Panel B of Appendix Figure B.8 documents that the overrepresentation of smaller factions in safe and contested list positions carries over to realized election outcomes.

[20] A cubic polynomial fit confirms the S-shape observed in Figure 3, as evidenced by the statistical significance of the second- and third-order terms (Appendix Table B.4). However, the R^2 increases only moderately when moving from a linear to a cubic specification (from 0.43 to 0.46).

Figure 3 – Allocation of list positions according to faction size using locally weighted scatter plot smoothing.



Note: Panel A displays the faction's share of safe positions in the 2019 local elections as a function of the faction's share of the party's votes in the 2017 national elections, categorized into 60 equal-sized bins. Similarly, Panel B shows the share of contested positions. The black line is obtained using locally weighted scatter plot smoothing (lowess). The red line represents the proportional allocation.

In columns (2) and (6) of Table 1 we add local party fixed effects, as specified by Equation (8). The results are basically unaltered when we leverage variation only within a given local party list (although standard errors increase by about 50%). We find that a 10 percentage points increase in a faction's size is associated with a 5.6 percentage points increase in safe ranks (with a 95% confidence interval spanning from 4.5 to 6.7), and a 7.7 percentage points increase in contested ranks (with a 95% confidence interval spanning 7.1 to 8.4).[21] In columns (3) and (7), we control for candidate incumbency and pre-merger characteristics. Finally, we add our set of controls for candidate characteristics in column (4) and (8). Again, in both of these specifications, the baseline results are robust.

Figure 4 visually displays the coefficient estimates and corresponding 95% confidence intervals. Rather than pooling candidates in the top three deciles into one category, as in Table 1, we report the results for all ten deciles, in addition to the safe category. There

[21]For comparison, Warwick and Druckman (2006) [p.648] report that among West European coalition governments, a 10 percentage point increase in seat shares is associated with a 7.9 percentage point increase in portfolio allocation.

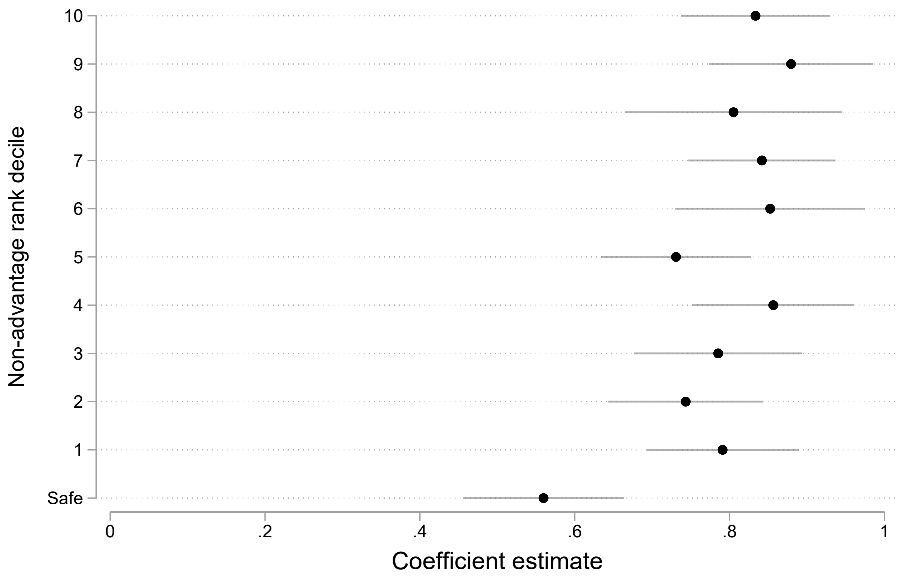
Table 1 – Main results

	Safe				Contested			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Size	0.616	0.560	0.591	0.544	0.802	0.773	0.739	0.708
	(0.036)	(0.053)	(0.102)	(0.118)	(0.021)	(0.033)	(0.064)	(0.068)
No. of elected in prev. council			0.022	0.022			0.017	0.018
			(0.011)	(0.011)			(0.007)	(0.007)
Mayor in prev. council			-0.045	-0.043			-0.025	-0.024
			(0.050)	(0.051)			(0.035)	(0.036)
Dist. to municipal center (in hours)			0.045	0.042			0.016	0.018
			(0.077)	(0.085)			(0.048)	(0.055)
Population urban share			-0.136	-0.145			-0.016	-0.012
			(0.079)	(0.102)			(0.052)	(0.065)
Female candidate share				0.094				0.011
				(0.074)				(0.067)
Young candidate share				0.071				0.069
				(0.145)				(0.104)
Highly educated candidate share				-0.002				-0.022
				(0.095)				(0.054)
Local party FE	NO	YES	YES	YES	NO	YES	YES	YES
Mean of outcome variable	0.384	0.384	0.384	0.394	0.384	0.384	0.384	0.394
Observations	658	658	658	642	658	658	658	642
Clusters	38	38	38	38	38	38	38	38
R-squared	0.43	0.46	0.47	0.48	0.74	0.74	0.75	0.76

Notes: Columns (1) and (5) provide the results from simple linear regressions of a faction's share of list positions on the faction's share of the party's votes. Columns (2) and (6) represent separate regressions based on Equation (8). 'Safe' list positions are those with the discretionary 25% advantage in personal votes, while 'contested' positions are those in the top 30% of the list after advantaged candidates have been excluded. Faction size is measured as a faction's relative contribution to the party's votes and is given by Equation (7). In columns (3) and (7), we control for several faction-level covariates. 'No. of elected in prev. council' refers to the number of a faction's elected politicians in the pre-merger council (2015–2019) who are running for election in 2019. 'Mayor in prev. council' is a dummy variable indicating whether a faction had the mayor in the pre-merger council (2015–2019) who is running for election in 2019. 'Dist. to municipal center (in hours)' represents the driving distance from the town hall of each pre-merger municipality to the town hall of the largest pre-merger municipality in the merger. 'Population urban share' measures the share of the population in the pre-merger municipality that lived in an urban area as of 2019. In columns (4) and (8), we control for the share of factions' female, highly educated, and young (under 30) candidates on the list as a proportion of their total number of candidates.

are three key takeaways from this figure. First, for all types of list positions, we can reject a one-to-one relationship between faction size and shares of positions (because none of the 95% confidence intervals includes one). Second, the allocation of safe list positions is more biased towards smaller factions than contestable and hopeless positions. Third, all non-safe positions appear to be allocated similarly across faction sizes (with a coefficient of about 0.8). Therefore, the results in Table 1 are insensitive to the chosen cut-off point between contested and hopeless positions.[22]

Figure 4 – Coefficient of faction size on faction's share of different non-advantaged rank decile positions.



Note: The figure plots estimates of the coefficient of 'Size' from Equation 8 on a faction's share of different non-advantaged rank decile positions. The estimated coefficient of 'Size' on faction's share of safe positions (Table 1, column 2) is included at the bottom for reference. The corresponding regression results are provided in Appendix Table B.5.

7.2 *Alternative explanations*

A possible explanation for the underpayment of larger factions in safe seats could be that they consistently secure the first spot on the list, and the remaining safe positions are allocated to the smaller factions. However, larger factions do not secure the first sport more frequently than their size would imply (Figure B.10).

[22] In Appendix Figure B.9, we add the set of controls from column (3) and (7) of Table 1. The corresponding regression results are found in Appendix Table B.6. Although the precision of the estimates reduces, the patterns are the same as in Figure 4.

A potential concern is that our measure of faction size proxies population density, and that an underlying urban-rural cleavage is driving our results. While we control for a faction's urban population share in our main analysis, in Appendix B, we further address this concern by splitting our sample based on mergers' compositional features. The analysis shows that our patterns do not depend on (i) the number and presence of rural municipalities in the merger (Appendix Figure B.11), and (ii) the degree of size heterogeneity between different factions (Appendix Figure B.12). Taken together, these results suggest that the urban-rural divide does not play a role in our results.

We next address explanations related to the merger process itself. First, one might worry that council downsizing or a high number of merger partners intensifies competition for list positions in ways that affect the bargaining process or the candidate pool. However, our results appear similar across municipalities with different reductions in council size (Appendix Figure B.13) and number of merger partners (Appendix Figure B.14). Similarly, our results do not seem to be driven by changes in the candidate pool. There are minimal differences in incumbent re-nomination rates between merging and non-merging municipalities (Appendix Figure B.15), and our estimates are robust to controlling for incumbency and candidate characteristics (Table 1).

Second, we recognize that municipal mergers are not random, but driven by economic, geographic, demographic, and political factors. If mergers primarily occur where party elites already held mutual regard, we would expect more equitable power-sharing than in the average party. Yet, our analysis suggests that geographic proximity and conservative party control are the primary determinants of mergers (Appendix Table B.7). This suggests that selection into mergers is driven by national political factors (i.e., ties to the national Conservative party) and not alignment between local factions. Moreover, our results are invariant to whether a merger was voluntary or forced by the central government (Appendix Table B.8). This analysis also helps address the possibility that larger factions have promised smaller factions attractive list positions to secure their agreement to the merger. Such a scenario would require a high level of coordination and commitment, with most parties in the larger municipalities agreeing to cede influence to candidates in smaller municipalities. Nonetheless, the similarity of our results across forced and voluntary mergers further alleviates this concern, as such strategic deals were unnecessary in mandated mergers.

7.3 *Heterogeneous Effects: the Role of Stakes*

Next, we analyze how the allocation of list positions varies with the stakes of the election. Our theory predicts that if larger factions are under-represented in safe positions (as we found in Section 7.1), increasing the stakes should magnify this under-representation and lowering them should shrink it.

To evaluate this prediction empirically, we first use a party's expected top-two status as a proxy for increasing the stakes. The rationale is that the two largest parties are competing to become the primary governing party: for these parties, high electoral performance not only leads to more seats, it also allows them to control the mayoralty and other key executive positions. Panel A of Table 2 displays the results of heterogeneous effects by election stakes in the 2019 election. The variable 'Top-two party' indicates whether a party was expected to be among the two largest parties in the 2019 election.[23] For completeness, columns (1) and (6) report the baseline linear regression results from Table 1.

The negative interaction effects between *Size* and *Top-two party* observed in columns (2)-(5) indicate that the over-representation of smaller factions is significantly more pronounced in the top two parties of each municipality, in line with Proposition 3. The interaction effects are statistically significant and increase with the addition of controls. The analysis of the contested positions reveals a qualitatively similar, but more muted pattern, again in line with the predictions of our theory (see Empirical Implication 2). This indicates that the dynamics of factional representation differ notably between leading parties and others, emphasizing the strategic importance of consensus and power-sharing in competitive electoral environments.

A second approach to evaluate the effect of changing the stakes is to compare the 2019 election with the subsequent municipal election of 2023. As previously mentioned, survey data show that respondents from merging municipalities perceived higher stakes in the 2019 election compared to 2023 (Appendix Figure B.7). Since the 2023 election arguably involved

[23] Similar results (available upon request) are obtained when using alternative measures of election stakes, such as the party's expected vote share, realized top-two status, or whether it won the mayoral position.

Table 2 – Heterogeneous effects by election stakes.

Panel A: 2019 Election

	Safe					Contested				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Size	0.616	0.658	0.607	0.630	0.584	0.802	0.821	0.794	0.762	0.731
	(0.036)	(0.052)	(0.076)	(0.101)	(0.116)	(0.021)	(0.028)	(0.043)	(0.064)	(0.066)
Top-two party		0.054					0.023			
		(0.031)					(0.016)			
Size × Top-two party		-0.134	-0.148	-0.395	-0.397		-0.058	-0.064	-0.239	-0.230
		(0.081)	(0.120)	(0.127)	(0.115)		(0.042)	(0.061)	(0.069)	(0.077)
Local party FE	NO	NO	YES	YES	YES	NO	NO	YES	YES	YES
Incumbency and pre-merger controls	NO	NO	NO	YES	YES	NO	NO	NO	YES	YES
Candidate characteristic controls	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES
Mean of outcome variable	0.384	0.384	0.384	0.384	0.394	0.384	0.384	0.384	0.384	0.394
Observations	658	658	658	658	642	658	658	658	658	642
Clusters	38	38	38	38	38	38	38	38	38	38
R-squared	0.43	0.44	0.46	0.49	0.50	0.74	0.74	0.75	0.76	0.76

Panel B: 2023 Election

	Safe					Contested				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Size	0.940	1.016	1.022	0.883	0.862	0.939	0.946	0.943	0.821	0.796
	(0.036)	(0.042)	(0.063)	(0.095)	(0.095)	(0.021)	(0.030)	(0.044)	(0.074)	(0.069)
Top-two party		0.095					0.008			
		(0.033)					(0.021)			
Size × Top-two party		-0.245	-0.281	-0.537	-0.502		-0.022	-0.027	-0.173	-0.132
		(0.082)	(0.121)	(0.134)	(0.132)		(0.053)	(0.077)	(0.095)	(0.097)
Local party FE	NO	NO	YES	YES	YES	NO	NO	YES	YES	YES
Incumbency and pre-merger controls	NO	NO	NO	YES	YES	NO	NO	NO	YES	YES
Candidate characteristic controls	NO	NO	NO	NO	YES	NO	NO	NO	NO	YES
Mean of outcome variable	0.390	0.390	0.390	0.390	0.406	0.390	0.390	0.390	0.390	0.406
Observations	626	626	626	626	601	626	626	626	626	601
Clusters	38	38	38	38	38	38	38	38	38	38
R-squared	0.60	0.61	0.61	0.64	0.64	0.74	0.74	0.74	0.75	0.76

Notes: Columns (2) and (7) provide the results from simple linear regressions of a faction's share of list positions on the faction's share of the party's votes ('Size'), the post-merger party's top-two status ('Top-two party') and their interaction. 'Top-two party' is a dummy variable indicating whether the party is expected to be among the two largest parties in the 2019 election to the merged municipality council. The prediction is based on votes in pre-merger municipalities from the local election of 2015, aggregated to the post-merger municipality level. Columns (3) and (8) represent separate regressions based on Equation (9). In columns (4) and (9), we control for several faction-level covariates. 'No. of elected in prev. council' refers to the number of a faction's elected politicians in the pre-merger council (2015–2019) who are running for election in 2019. 'Mayor in prev. council' is a dummy variable indicating whether a faction had the mayor in the pre-merger council (2015–2019) who is running for election in 2019. 'Dist. to municipal center (in hours)' represents the driving distance from the town hall of each pre-merger municipality to the town hall of the largest pre-merger municipality in the merger. 'Population urban share' measures the share of the population in the pre-merger municipality that lived in an urban area as of 2019. In columns (5) and (10), we control for the share of factions' female, highly educated, and young (under 30) candidates on the list as a proportion of their total number of candidates. Panel A displays the results for the 2019 election, and Panel B for the 2023 election.

fewer high-salience changes to local public service provision, it is reasonable to expect that the return to controlling executive and council positions were lower. As a result, our theory implies that the patterns of over-representation of smaller factions should be less pronounced for both large and smaller parties alike, and especially in safe seats.

The results of Panel B of Table 2 are squarely in line with this prediction: comparing column (1) across panels shows that in the 2023 election, safe positions were allocated more proportionally than in 2019.[24] Comparing columns (2) to (5) across reveals that the over-representation of smaller factions in larger parties is still present in 2023. Similarly, columns (6) to (10) show that the higher proportionality observed in contested seats also continues in 2023.

While the quantitative differences between 2019 and 2023 offer additional support for our theory, their qualitative similarities show that the patterns we document are structural.

Although the 2019 elections offer a best-case scenario for the empirical evaluation of our theory, the analysis of the 2023 election shows that our theory does not simply apply to the particular circumstances of the 2019 election, but holds more broadly: consensus-based negotiations favor smaller factions—particularly in safe ranks–even when the stakes the election are low overall, as long as the stakes for the individual party remain high.

8. Conclusion

Factions play a central role in the internal dynamics of political parties, shaping candidate selection, policy platforms, and resource allocation, yet they are difficult to study empirically due to their informal and opaque nature. This article addresses this challenge by combining theory and evidence from Norwegian local elections following a wave of municipal mergers, using candidates' pre-merger municipality of residence to identify factions and to study how parties allocate a scarce internal resource—list ranks.

[24]Note that some municipalities decreased the size of their council from 2020 to 2024, thereby reducing the number of seats available in the 2023 election. However, we do not find notable differences in allocations between municipalities that reduced their council size and those that did not. Moreover, Appendix Figure B.3 illustrates that the distribution of pre-advantaged positions is similar across the 2019 and 2023 elections, thus suggesting the move towards proportionality is not due to changes in the supply of safe positions.

Our theory models internal power-sharing as a mechanism to incentivize member mobilization and yields distinct predictions for contested and safe list positions. In contested positions, efficiency concerns favor smaller factions because larger factions face greater internal free-riding, whereas in safe positions efficiency is irrelevant and allocations reflect bargaining power alone. As a result, under consensus-based bargaining, smaller factions are over-compensated in both cases, with stronger over-representation in safe ranks.

Our empirical analysis shows that smaller factions are over-represented across both contested and safe positions, with especially strong advantages in safe ranks. In addition, this over-representation intensifies when electoral stakes are high. These findings align with our consensus-based model of intra-party bargaining where smaller factions have significant bargaining power due, for instance, to strong norms of consensus or an extrinsic political cost associated with party disunity.

Norway provides a uniquely suitable setting to study intra-party factions, as it allows us to observe both factional divisions and the allocation of scarce internal resources. However, our findings speak to broader debates on intra-party power sharing. In particular, they highlight the centrality of geography in intra-party bargaining in subnational politics and, more generally, in territorially structured parties—such as many Western European parties—where multi-level organizations resemble the setting studied here.

While our findings are likely to generalize to other list-based systems, future work should examine how they vary with institutional features such as candidate-centered competition, centralized nominations, or district magnitude. An important extension would consider settings where factions are primarily ideological rather than geographic—for example, France, where candidate-linked "mini-parties" channel campaign resources that may proxy mobilization capacity. More broadly, this article highlights the role of consensual intra-party rules and norms, while pointing to a wider research agenda on how intra-party dynamics emerge and shape political outcomes.

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Online Appendix: Party Factions and Candidate Selection

Online Appendix A: Theoretical Results

A.1: Proofs of Formal Statements

Proof of Lemma 1. Consider a member m of faction i, who chooses effort e_m taking all other members' efforts as given. Her expected payoff is

$$x_i^0 + x_i^S S \Pr(\pi = 1) - \frac{e_m^2}{2}.$$

Recalling that

$$\Pr(\pi = 1) = \theta\big(Q_A(e_A) + Q_B(e_B)\big),$$

and that e_m only affects $\Pr(\pi = 1)$ via Q_i, the first-order condition with respect to e_m is

$$e_m = x_i^S S \frac{\partial}{\partial e_m}\left[\theta \prod_{j \in i} e_j^{1/n_i}\right] = x_i^S S\theta \frac{1}{n_i} e_m^{\frac{1}{n_i}-1} \prod_{j \in i \setminus \{m\}} e_j^{1/n_i}.$$

First, we show that there is no asymmetric equilibrium: the expression of e_m can be rearranged as

$$e_m = \left(x_i^S S\theta \frac{1}{n_i} \prod_{j \in i \setminus \{m\}} e_j^{1/n_i}\right)^{\frac{n_i}{2n_1 - 1}} = \left(x_i^S S\theta \frac{1}{n_i}\right)^{\frac{n_i}{2n_1-1}} \prod_{j \in i \setminus \{m\}} e_j^{\frac{1}{2n_i - 1}}$$

Suppose that in equilibrium $e_m > e_\ell$ for some other member ℓ. That means

$$1 < \frac{e_m}{e_\ell} = \left(\frac{e_\ell}{e_m}\right)^{\frac{1}{2n_i-1}} < 1,$$

which is a contradiction. We thus focus on symmetric equilibria within faction i, which is without loss of generality given that members face identical costs and enter the mobilization technology symmetrically. In such equilibria, $e_j = e_i$ for all $j \in i$, so the expression simplifies to

$$e_i = \theta x_i^S S \frac{1}{n_i}.$$

Notice that Assumption 1 ensures that in equilibrium $\Pr(\pi = 1) \in [0, 1]$. Thus, individual equilibrium effort is proportional to the faction's share of performance-contingent resources and inversely proportional to faction size. □

Proof of Lemma 2. From Lemma 1, we have

$$e_i = \frac{\theta x_i^S S}{n_i} \quad \text{and} \quad \Pi(\mathbf{x}) = \Pr(\pi = 1) = \theta(e_{\mathcal{A}} + e_{\mathcal{B}}) = \theta^2 S\left(\frac{x_{\mathcal{A}}^S}{n_{\mathcal{A}}} + \frac{x_{\mathcal{B}}^S}{n_{\mathcal{B}}}\right).$$

Since $x^S_{\mathcal{B}} = 1 - x^S_{\mathcal{A}}$, the joint payoff $W(\mathbf{x})$ can be written as

$$W(\mathbf{x}) = 1 + \theta^2 S^2 \left[\frac{x^S_{\mathcal{A}}}{n_{\mathcal{A}}} + \frac{1 - x^S_{\mathcal{A}}}{n_{\mathcal{B}}} - \frac{1}{2} \left(\frac{(x^S_{\mathcal{A}})^2}{n^2_{\mathcal{A}}} + \frac{(1 - x^S_{\mathcal{A}})^2}{n^2_{\mathcal{B}}} \right) \right].$$

To characterize the maximizer, it is convenient to define an affine transformation:

$$\widehat{W}(x) \equiv \frac{x}{n_{\mathcal{A}}} + \frac{1 - x}{n_{\mathcal{B}}} - \frac{1}{2} \left(\frac{x^2}{n^2_{\mathcal{A}}} + \frac{(1 - x)^2}{n^2_{\mathcal{B}}} \right),$$

which is strictly concave in x and thus admits a unique interior maximizer that solves

$$\widehat{W}'(\tilde{x}) = \left(\frac{1}{n_{\mathcal{A}}} - \frac{1}{n_{\mathcal{B}}} \right) - \frac{x}{n^2_{\mathcal{A}}} + \frac{1 - x}{n^2_{\mathcal{B}}} = 0 \quad \Rightarrow \tilde{x} = \frac{\frac{1}{n_{\mathcal{A}}} - \frac{1}{n_{\mathcal{B}}} + \frac{1}{n^2_{\mathcal{B}}}}{\frac{1}{n^2_{\mathcal{A}}} + \frac{1}{n^2_{\mathcal{B}}}} < 1.$$

Letting $n_{\mathcal{A}} = n\eta$ and $n_{\mathcal{B}} = n(1 - \eta)$ and recalling that x must be in the unit interval implies

$$x^*(\eta) = \max \left\{ 0, \frac{\eta^2 - n\eta(1 - \eta)(2\eta - 1)}{\eta^2 + (1 - \eta)^2} \right\} = \max \left\{ 0, \eta - \frac{(n - 1)\eta(1 - \eta)(2\eta - 1)}{\eta^2 + (1 - \eta)^2} \right\} \leq \eta,$$

with strict inequality when $\eta \in (1/2, 1)$ and $n > 1$. □

Proof of Proposition 1. Suppose, by contradiction, that there exists an equilibrium division rule

$$\hat{\mathbf{x}} \in \arg\max_{\mathbf{x}} V_{\mathcal{A}}(\mathbf{x})^{\alpha} V_{\mathcal{B}}(\mathbf{x})^{1-\alpha}$$

such that $\hat{x}^S_{\mathcal{A}} > \eta$.
From Lemma 1, equilibrium effort and the probability of high performance depend on the division rule only through $x^S_{\mathcal{A}}$. Hence continuation payoffs can be written as

$$V_{\mathcal{A}}(\mathbf{x}) = x^0_{\mathcal{A}} + \Pi^*(x^S_{\mathcal{A}})\, x^S_{\mathcal{A}} S - \frac{[\theta x^S_{\mathcal{A}} S]^2}{2n^2_{\mathcal{A}}} = x^0_{\mathcal{A}} + \widetilde{V}_{\mathcal{A}}(x^S_{\mathcal{A}}),$$
$$V_{\mathcal{B}}(\mathbf{x}) = 1 - x^0_{\mathcal{A}} + \Pi^*(x^S_{\mathcal{A}})(1 - x^S_{\mathcal{A}}) S - \frac{[\theta(1 - x^S_{\mathcal{A}}) S]^2}{2n^2_{\mathcal{B}}} = 1 - x^0_{\mathcal{A}} + \widetilde{V}_{\mathcal{B}}(x^S_{\mathcal{A}}),$$

where $\Pi^*(\cdot)$ denotes the equilibrium probability of high performance.
Therefore, joint surplus can be written as

$$W(\mathbf{x}) = V_{\mathcal{A}}(\mathbf{x}) + V_{\mathcal{B}}(\mathbf{x}) = 1 + \widetilde{W}(x^S_{\mathcal{A}}) = 1 + \widetilde{V}_{\mathcal{A}}(x) + \widetilde{V}_{\mathcal{B}}(x).$$

By Lemma 2, for any $\hat{x}^S_{\mathcal{A}} > \eta$ there exists $x'^S_{\mathcal{A}} \leq \eta$ such that

$$\widetilde{W}(x'^S_{\mathcal{A}}) > \widetilde{W}(\hat{x}^S_{\mathcal{A}}).$$

Construct an alternative feasible division rule $\mathbf{x}'$ as follows: set $x'^S_{\mathcal{A}} \leq \eta$ and choose $x'^0_{\mathcal{A}}$ so that

$$V_{\mathcal{A}}(\mathbf{x}') = V_{\mathcal{A}}(\hat{\mathbf{x}}).$$

Since $\widetilde{V}_{\mathcal{A}}(x'^S_{\mathcal{A}}) < \widetilde{V}_{\mathcal{A}}(\hat{x}^S_{\mathcal{A}})$, this requires $x'^0_{\mathcal{A}} > \hat{x}^0_{\mathcal{A}}$.

Using the definition of joint surplus,

$$V_{\mathcal{B}}(\mathbf{x}') = W(\mathbf{x}') - V_{\mathcal{A}}(\mathbf{x}') > W(\hat{\mathbf{x}}) - V_{\mathcal{A}}(\hat{\mathbf{x}}) = V_{\mathcal{B}}(\hat{\mathbf{x}}).$$

Thus $\mathbf{x}'$ weakly improves faction $\mathcal{A}$'s payoff and strictly improves faction $\mathcal{B}$'s payoff, implying

$$V_{\mathcal{A}}(\mathbf{x}')^{\alpha} V_{\mathcal{B}}(\mathbf{x}')^{1-\alpha} > V_{\mathcal{A}}(\hat{\mathbf{x}})^{\alpha} V_{\mathcal{B}}(\hat{\mathbf{x}})^{1-\alpha},$$

contradicting the optimality of $\hat{\mathbf{x}}$ in the Nash bargaining problem. Hence no equilibrium division rule can satisfy $\hat{x}^S_{\mathcal{A}} > \eta$. □

Proof of Proposition 2. Fix the equilibrium value of $x^S_{\mathcal{A}}$ characterized above and let $\Pi^* \equiv \Pi(x^S_{\mathcal{A}})$ denote the associated equilibrium probability of high performance. Using Proposition 1, the Nash bargaining solution for safe rewards $x^0_{\mathcal{A}}$ solves

$$\max_z [z + \widetilde{V}_{\mathcal{A}}]^{\alpha} [1 - z + \widetilde{V}_{\mathcal{B}}]^{1-\alpha} = \max_z \left\{ \alpha \log\left(z + \widetilde{V}_{\mathcal{A}}\right) + (1-\alpha) \log\left(1 - z + \widetilde{V}_{\mathcal{B}}\right) \right\}$$

and can thus be written as

$$x^0_{\mathcal{A}}(\alpha) = \alpha + \alpha \widetilde{V}_{\mathcal{B}} - (1-\alpha)\widetilde{V}_{\mathcal{A}},$$

where

$$\widetilde{V}_{\mathcal{A}} = \Pi^* x^S_{\mathcal{A}} S - \frac{(\theta x^S_{\mathcal{A}} S)^2}{2n^2_{\mathcal{A}}}, \qquad \widetilde{V}_{\mathcal{B}} = \Pi^*(1 - x^S_{\mathcal{A}})S - \frac{(\theta(1 - x^S_{\mathcal{A}})S)^2}{2n^2_{\mathcal{B}}}.$$

Substituting these expressions and collecting terms yields

$$x^0_{\mathcal{A}}(\alpha) = \alpha + \Pi^* S(\alpha - x^S_{\mathcal{A}}) + (1-\alpha)c_{\mathcal{A}} - \alpha c_{\mathcal{B}}, \tag{10}$$

where

$$c_{\mathcal{A}} \equiv \frac{(\theta x^S_{\mathcal{A}} S)^2}{2n^2_{\mathcal{A}}}, \qquad c_{\mathcal{B}} \equiv \frac{(\theta(1 - x^S_{\mathcal{A}})S)^2}{2n^2_{\mathcal{B}}}.$$

Define the difference between safe and contingent shares as

$$D(\alpha) \equiv x^0_{\mathcal{A}}(\alpha) - x^S_{\mathcal{A}}.$$

Using (10), this difference can be written as

$$D(\alpha) = (\alpha - x^S_{\mathcal{A}})(1 + \Pi^* S) + c_{\mathcal{A}} - \alpha(c_{\mathcal{A}} + c_{\mathcal{B}}). \tag{11}$$

Expression (11) shows that $D(\alpha)$ is affine in α. Differentiating with respect to α gives

$$\frac{dD(\alpha)}{d\alpha} = 1 + \Pi^* S - (c_{\mathcal{A}} + c_{\mathcal{B}}).$$

Hence $D(\alpha)$ is strictly increasing in α whenever

$$1 + \Pi^* S > c_{\mathcal{A}} + c_{\mathcal{B}}. \tag{12}$$

Condition (12) holds under Assumption 1:

$$c_{\mathcal{A}} + c_{\mathcal{B}} = \frac{1}{2}\left(\frac{(\theta x_{\mathcal{A}}^S S)^2}{n_{\mathcal{A}}^2} + \frac{(\theta(1-x_{\mathcal{A}}^S)S)^2}{n_{\mathcal{B}}^2}\right) < \frac{(\theta S)^2}{2}\left(\frac{x_{\mathcal{A}}^S}{n_{\mathcal{A}}} + \frac{(1-x_{\mathcal{A}}^S)}{n_{\mathcal{B}}}\right)^2 < 1.$$

Moreover, using again Assumption 1,

$$D(0) = -x_{\mathcal{A}}^S(1+\Pi^* S) - c_{\mathcal{A}} = -x_{\mathcal{A}}^S\left(1 + \Pi^* S - x_{\mathcal{A}}^S\frac{(\theta S)^2}{2n_{\mathcal{A}}^2}\right) < 0 \tag{13}$$

$$D(1) = (1-x_{\mathcal{A}}^S)(1+\Pi^* S) - c_{\mathcal{B}} = (1-x_{\mathcal{A}}^S)\left(1+\Pi^* S - (1-x_{\mathcal{A}}^S)\frac{(\theta S)^2}{2n_{\mathcal{B}}^2}\right) > 0. \tag{14}$$

Since $D(\alpha)$ is continuous and strictly increasing, there exists a unique cutoff α^* such that $D(\alpha^*) = 0$, i.e., $x_{\mathcal{A}}^0(\alpha^*) = x_{\mathcal{A}}^S$. It follows immediately that $x_{\mathcal{A}}^0 < x_{\mathcal{A}}^S$ iff $\alpha < \alpha^*$.
To complete the proof, it remains to show that $\alpha^* < \eta$. Evaluating (11) at $\alpha = \eta$ yields

$$\begin{aligned} D(\eta) =& (\eta - x_{\mathcal{A}}^S)(1+\Pi^* S) + c_{\mathcal{A}}(1-\eta) - \eta c_{\mathcal{B}} \\ =& (\eta - x_{\mathcal{A}}^S)(1+\Pi^* S) + (1-\eta)\frac{(\theta x_{\mathcal{A}}^S S)^2}{2n_{\mathcal{A}}^2} - \eta\frac{(\theta(1-x_{\mathcal{A}}^S)S)^2}{2n_{\mathcal{B}}^2} > 0, \end{aligned}$$

Since $\eta c_{\mathcal{B}} < \frac{1}{2}\eta(1-x_{\mathcal{A}}^S)$ and $\eta - x_{\mathcal{A}}^S - \frac{1}{2}\eta(1-x_{\mathcal{A}}^S) = \frac{\eta - x_{\mathcal{A}}^S}{2} \geq 0$. Since $D(\alpha^*) = 0$ and $D(\alpha)$ is strictly increasing, it must be that $\alpha^* < \eta$, completing the proof. □

Proof of Proposition 3. Denote $\Pi^* \equiv \Pi(x_{\mathcal{A}}^S)$ the probability of high performance under the equilibrium valye $x_{\mathcal{A}}^S$, which does not depend on S. As derived above, faction $\mathcal{A}$'s share of safe rewards can be written as

$$x_{\mathcal{A}}^0(\alpha) = \alpha + \Pi^* S(\alpha - x_{\mathcal{A}}^S) + (1-\alpha)c_{\mathcal{A}} - \alpha c_{\mathcal{B}}, \tag{15}$$

where

$$\Pi^* S = \theta^2 S^2\left(\frac{x_{\mathcal{A}}^S}{n_{\mathcal{A}}} + \frac{1-x_{\mathcal{A}}^S}{n_{\mathcal{B}}}\right), \qquad c_{\mathcal{A}} = \frac{(\theta x_{\mathcal{A}}^S S)^2}{2n_{\mathcal{A}}^2}, \qquad c_{\mathcal{B}} = \frac{(\theta(1-x_{\mathcal{A}}^S)S)^2}{2n_{\mathcal{B}}^2}.$$

We can thus write $x_{\mathcal{A}}^0(\alpha) = \alpha + \theta^2 S^2 G(\alpha)$, where $G(\alpha) \propto \frac{\partial x_{\mathcal{A}}^0(\alpha)}{\partial S}$ equals

$$G(\alpha) = \left(\frac{x_{\mathcal{A}}^S}{n_{\mathcal{A}}} + \frac{1-x_{\mathcal{A}}^S}{n_{\mathcal{B}}}\right)(\alpha - x_{\mathcal{A}}^S) + (1-\alpha)\frac{(x_{\mathcal{A}}^S)^2}{2n_{\mathcal{A}}^2} - \alpha\frac{(1-x_{\mathcal{A}}^S)^2}{2n_{\mathcal{B}}^2} \tag{16}$$

Notice that

$$\frac{dG(\alpha)}{d\alpha} = \frac{x_{\mathcal{A}}^S}{n_{\mathcal{A}}} + \frac{1-x_{\mathcal{A}}^S}{n_{\mathcal{B}}} - \frac{(x_{\mathcal{A}}^S)^2}{2n_{\mathcal{A}}^2} - \frac{(1-x_{\mathcal{A}}^S)^2}{2n_{\mathcal{B}}^2} > 0.$$

To complete the proof, we just need to show that

$$G(x_{\mathcal{A}}^S) = (1-x_{\mathcal{A}}^S)\frac{(x_{\mathcal{A}}^S)^2}{2n_{\mathcal{A}}^2} - x_{\mathcal{A}}^S\frac{(1-x_{\mathcal{A}}^S)^2}{2n_{\mathcal{B}}^2} \propto \frac{x_{\mathcal{A}}^S}{n_{\mathcal{A}}^2} - \frac{1-x_{\mathcal{A}}^S}{n_{\mathcal{B}}^2} < 0$$

which follows from $\frac{x_{\mathcal{A}}^S}{1-x_{\mathcal{A}}^S} \leq \frac{\eta}{1-\eta} \leq \left(\frac{\eta}{1-\eta}\right)^2 = \left(\frac{n_{\mathcal{A}}}{n_{\mathcal{B}}}\right)^2$. This completes the proof. □

A.2. Generalized Model

Consider a more general version of the model with k factions, ordered by size, so without loss of generality, $\eta_i > \eta_j$ implies $i > j$. We introduce ideology by assuming that factions value, to some extent, party resources, *independently* of their own faction's share of them. Formally, the payoff of a member m of faction i is equal to

$$\phi + (1-\phi)x_i^0 + \pi S[\phi + (1-\phi)x_i^S] - \frac{e_m^2}{2}, \tag{17}$$

where $\phi \in [0,1]$ captures, in a stylized manner, the importance of ideological considerations (relative to the resources considered in the baseline). The model we study in the body of the paper corresponds to the special case of $k = 2$ and $\phi = 0$.

Equation (17) implies that the first-order condition for optimal effort by member m of faction i is:

$$e_m = \frac{\partial}{\partial e_m}\left[\pi S[\phi + (1-\phi)x_i^S]\right] = S[\phi + (1-\phi)x_i^S]\frac{\partial \Pr(\pi = 1)}{\partial e_m}.$$

Using the fact that $\Pr(\pi = 1) = \theta \sum_{j=1}^k Q_j(e_j)$ where $Q_j(e_j) = \prod_{m \in j} e_m^{1/n_j}$, and proceeding as in the proof of Lemma 1, we obtain that in any symmetric equilibrium within faction i:

$$e_i^*(\mathbf{x}^S) = \frac{\theta S[\phi + (1-\phi)x_i^S]}{n_i}. \tag{18}$$

The equilibrium probability of high performance is then:

$$\Pi(\mathbf{x}^S) = \theta \sum_{i=1}^k Q_i(e_i^*) = \theta \sum_{i=1}^k e_i^* = \theta^2 S \sum_{i=1}^k \frac{\phi + (1-\phi)x_i^S}{n_i}. \tag{19}$$

Substituting equilibrium efforts back into each faction's expected payoff and factions' joint payoff we obtain

$$V_i(\mathbf{x}^0, \mathbf{x}^S) = \phi + (1-\phi)x_i^0 + \Pi(\mathbf{x}^S)S[\phi + (1-\phi)x_i^S] - \frac{\theta^2 S^2[\phi + (1-\phi)x_i^S]^2}{2n_i^2}, \tag{20}$$

$$W(\mathbf{x}^S) = \sum_{i=1}^k V_i(\mathbf{x}^0, \mathbf{x}^S) = (k\phi + 1 - \phi)(1 + S\Pi(\mathbf{x}^S)) - \sum_{i=1}^k \frac{\theta^2 S^2[\phi + (1-\phi)x_i^S]^2}{2n_i^2}, \tag{21}$$

where $\Pi(\mathbf{x}) = S\theta^2 \frac{\sum_{i=1}^k \phi + (1-\phi)x_i^S}{n_i}$. Substituting the constraint $1 - \sum_{l=1}^{k-1} x_l^S = x_k^S$, and letting

$$z_i^S = \frac{\phi + (1-\phi)x_i^S}{\phi k + 1 - \phi}$$

we obtain

$$\begin{aligned} W^\dagger(\mathbf{z}^S) =& (k\phi + 1 - \phi)^2 \left(1 + (S\theta)^2 \sum_{i=1}^{k-1} \frac{z_i^S}{n_i} + (S\theta)^2 \frac{1 - \sum_{l=1}^{k-1} z_l^S}{n_k}\right) \\ & - (S\theta)^2 \frac{1}{2}(k\phi + 1 - \phi)^2 \left(\sum_{i=1}^{k-1}\left(\frac{z_i^S}{n_i}\right)^2 + \left(\frac{1 - \sum_{l=1}^{k-1} z_l^S}{n_k}\right)^2\right) \end{aligned}$$

Differentiating with respect to z_i^S yields

$$(S\theta)^2(k\phi+1-\phi)^2\left(\frac{1}{n_i}-\frac{1}{n_k}-\frac{z_i^S}{n_i^2}+\frac{1-\sum_{l=1}^{k-1}z_l^S}{n_k^2}\right),$$

which, rearranged and set equal to zero, gives

$$\frac{z_i^S}{n_i}=1-\frac{n_i}{n_k}\left(1-\frac{1-\sum_{l=1}^{k-1}z_l^S}{n_k}\right)$$

which is decreasing in n_i, Which implies that x_i^S/η_i decreases in faction size. As a result, Proposition 1 generalizes.
From this, we obtain that the optimal division rule of the safe rewards satisfies:

$$\max_{\mathbf{x}^0}\sum_{i=1}^{k}\alpha_i\log\left\{\phi+(1-\phi)x_i^0+\Pi(\mathbf{x}^S)S[\phi+(1-\phi)x_i^S]-\frac{\theta^2S^2[\phi+(1-\phi)x_i^S]^2}{2n_i^2}\right\},$$

at the equilibrium level of x_i^S characterized above. Again, it is convenient to re-express the problem in terms of

$$z_i^0=\frac{\phi+(1-\phi)x_i^0}{\phi k+1-\phi}$$

by dividing the objective function by $[\phi k+1-\phi]$. We obtain

$$\max_{\mathbf{z}^0}\left\{\sum_{i=1}^{k-1}\alpha_i\log\left(z_i^0+\widetilde{V}_i^\dagger\right)+\alpha_k\log\left(1-\sum_{l=1}^{k-1}z_l^0+\widetilde{V}_k^\dagger\right)\right\},$$

with

$$\widetilde{V}_i^\dagger=\theta^2S^s[\phi k+1-\phi]\left[z_i^S\sum_{i=1}^{k}\frac{z_l^S}{n_l}-\frac{1}{2}\left(\frac{z_i^S}{n_i}\right)^2\right]$$

Differentiating and setting the first order conditions to zero yields

$$\frac{z_i^0+\widetilde{V}_i^\dagger}{1-\sum_{l=1}^{k-1}z_l^0+\widetilde{V}_k^\dagger}=\frac{\alpha_i}{\alpha_k}$$

Notice that as bargaining power approach full size-invariance, we have that for every pair of factions i and ℓ with $n_i>n_\ell$, we have

$$z_i^0-z_\ell^0=\widetilde{V}_\ell^\dagger-\widetilde{V}_i^\dagger$$

which implies $z_i^0-z_\ell^0<0<z_i^S-z_\ell^S$. Hence, for sufficiently egalitarian bargaining weights, we must have that $x_i^0<x_i^S<\eta_i$ for every faction that is sufficiently large.

Online Appendix B: Supplementary Tables and Figures

Table B.1 – Description of mergers involved in the reform.

Post-reform	Pre-reform	Referendum	Participation	Effective from	In sample	Comment
710 Sandefjord	706 Sandefjord	No	Voluntary	Jan 1, 2017	No	Appointed intermediary council
	719 Andebu	No	Voluntary			
	720 Stokke	No	Voluntary			
712 Larvik	709 Larvik	No	Voluntary	Jan 1, 2018	No	Appointed intermediary council
	728 Lardal	No	Voluntary			
715 Holmestrand	714 Hof	No	Voluntary	Jan 1, 2018	No	Appointed intermediary council
	702 Holmestrand	No	Voluntary			
729 Færder	723 Tjøme	Yes	Voluntary	Jan 1, 2018	No	Extraordinary election prior to merger
	722 Nøtterøy	No	Voluntary			
5054 Indre Fosen	1624 Rissa	No	Voluntary	Jan 1, 2018	No	Appointed intermediary council
	1718 Leksvik	No	Voluntary			
1103 Stavanger	1103 Stavanger	Yes	Voluntary	Jan 1, 2020	Yes	
	1141 Finnøy	Yes	Voluntary			
	1142 Rennesøy	Yes	Voluntary			
1108 Sandnes	1102 Sandnes	Yes	Voluntary	Jan 1, 2020	Yes	
	1129 Forsand	No	Voluntary			
1506 Molde	1502 Molde	No	Voluntary	Jan 1, 2020	Yes	
	1543 Nesset	Yes	Voluntary			
	1545 Midsund	Yes	Voluntary			
1507 Ålesund	1504 Ålesund	No	Voluntary	Jan 1, 2020	Yes	
	1523 Ørskog	Yes	Voluntary			
	1529 Skodje	Yes	Voluntary			
	1534 Haram	Yes	Forced			
	1546 Sandøy	No	Voluntary			
1577 Volda	1444 Hornindal	No	Voluntary	Jan 1, 2020	Yes	
	1519 Volda	Yes	Voluntary			
1578 Fjord	1524 Norddal	Yes	Voluntary	Jan 1, 2020	Yes	
	1526 Stordal	Yes	Voluntary			
1579 Hustadvika	1548 Fræna	Yes	Voluntary	Jan 1, 2020	Yes	
	1551 Eide	Yes	Voluntary			
1806 Narvik	1805 Narvik	Yes	Voluntary	Jan 1, 2020	No	Involved split municipality
	1850 Tysfjord (split)	No	Forced			
	1854 Balangen	Yes	Voluntary			
1875 Hamarøy	1849 Hamarøy	Yes	Voluntary	Jan 1, 2020	No	Involved split municipality
	1850 Tysfjord (split)	No	Forced			
3002 Moss	104 Moss	No	Voluntary	Jan 1, 2020	Yes	
	136 Rygge	No	Voluntary			
3005 Drammen	602 Drammen	No	Voluntary	Jan 1, 2020	Yes	
	625 Nedre Eiker	Yes	Voluntary			
	711 Svelvik	No	Voluntary			
3014 Indre Østfold	122 Trøgstad	Yes	Voluntary	Jan 1, 2020	Yes	
	123 Spydeberg	Yes	Forced			
	124 Askim	No	Voluntary			
	125 Eidsberg	No	Voluntary			
	138 Hobøl	No	Voluntary			
3020 Nordre Follo	213 Ski	Yes	Voluntary	Jan 1, 2020	Yes	
	217 Oppegård	No	Voluntary			
3025 Asker	220 Asker	No	Voluntary	Jan 1, 2020	Yes	
	627 Røyken	No	Voluntary			
	628 Hurum	Yes	Voluntary			
3026 Aurskog-Høland	121 Rømskog	No	Voluntary	Jan 1, 2020	Yes	
	221 Aurskog-Høland	No	Voluntary			
3030 Lillestrøm	226 Sørum	No	Forced	Jan 1, 2020	Yes	
	227 Fet	Yes	Forced			
	231 Skedsmo	Yes	Forced			
3802 Holmestrand	713 Sande	Yes	Voluntary	Jan 1, 2020	Yes	
	715 Holmestrand	No	Voluntary			
3803 Tønsberg	704 Tønsberg	No	Voluntary	Jan 1, 2020	Yes	
	716 Re	Yes	Voluntary			
3817 Midt-Telemark	821 Bø	Yes	Voluntary	Jan 1, 2020	Yes	
	822 Sauherad	No	Voluntary			
4204 Kristiansand	1001 Kristiansand	No	Voluntary	Jan 1, 2020	Yes	
	1017 Songdalen	Yes	Voluntary			
	1018 Søgne	Yes	Forced			
4205 Lindesnes	1002 Mandal	No	Voluntary	Jan 1, 2020	Yes	
	1021 Marnardal	No	Voluntary			
	1029 Lindesnes	Yes	Forced			
4225 Lyngdal	1027 Audnedal	Yes	Voluntary	Jan 1, 2020	Yes	
	1032 Lyngdal	No	Voluntary			
4602 Kinn	1401 Flora	Yes	Voluntary	Jan 1, 2020	Yes	
	1439 Vågsøy	Yes	Voluntary			
4618 Ullensvang	1227 Jondal	Yes	Voluntary	Jan 1, 2020	Yes	
	1228 Odda	Yes	Voluntary			
	1231 Ullensvang	Yes	Voluntary			
4621 Voss	1234 Granvin	Yes	Voluntary	Jan 1, 2020	Yes	
	1235 Voss	No	Voluntary			
4624 Bjørnafjorden	1241 Fusa	No	Voluntary	Jan 1, 2020	Yes	
	1243 Os	No	Voluntary			
4626 Øygarden	1245 Sund	No	Voluntary	Jan 1, 2020	Yes	
	1246 Fjell	No	Voluntary			
	1259 Øygarden	No	Voluntary			
4631 Alver	1256 Meland	Yes	Voluntary	Jan 1, 2020	Yes	
	1260 Radøy	No	Voluntary			
	1263 Lindås	No	Voluntary			
4640 Sogndal	1418 Balestrand	Yes	Forced	Jan 1, 2020	Yes	
	1419 Leikanger	Yes	Forced			
	1420 Sogndal	Yes	Voluntary			
4647 Sunnfjord	1430 Gaular	Yes	Voluntary	Jan 1, 2020	Yes	
	1431 Jølster	Yes	Voluntary			
	1432 Førde	No	Voluntary			
	1433 Naustdal	Yes	Voluntary			
4649 Stad	1441 Selje	Yes	Voluntary	Jan 1, 2020	Yes	
	1443 Eid	Yes	Voluntary			
5001 Trondheim	5001 Trondheim	No	Voluntary	Jan 1, 2020	Yes	
	5030 Klæbu	Yes	Voluntary			
5006 Steinkjer	5004 Steinkjer	Yes	Voluntary	Jan 1, 2020	Yes	
	5039 Verran	Yes	Voluntary			
5007 Namsos	5005 Namsos	No	Voluntary	Jan 1, 2020	Yes	
	5040 Namdalseid	Yes	Voluntary			
	5048 Fosnes	Yes	Voluntary			
5055 Heim	1571 Halsa	Yes	Voluntary	Jan 1, 2020	No	Involved split municipality
	5011 Hemne	No	Voluntary			
	5012 Snillfjord (split)	No	Voluntary			
5056 Hitra	5013 Hitra	No	Voluntary	Jan 1, 2020	No	Involved split municipality

Continued on next page

Table B.1 continued

Post-reform	Pre-reform	Referendum	Participation	Effective from	In sample	Comment
	5012 Snillfjord (split)	No	Voluntary			
5057 Ørland	5015 Ørland	Yes	Forced	Jan 1, 2020	Yes	
	5017 Bjugn	Yes	Forced			
5058 Åfjord	5018 Åfjord	No	Voluntary	Jan 1, 2020	Yes	
	5019 Roan	Yes	Voluntary			
5059 Orkland	5012 Snillfjord (split)	No	Voluntary	Jan 1, 2020	No	Involved split municipality
	5016 Agdenes	No	Voluntary			
	5023 Meldal	No	Voluntary			
	5024 Orkdal	No	Voluntary			
5060 Nærøysund	5050 Vikna	Yes	Forced	Jan 1, 2020	Yes	
	5051 Nærøy	Yes	Voluntary			
5406 Hammerfest	2004 Hammerfest	Yes	Voluntary	Jan 1, 2020	Yes	
	2017 Kvalsund	Yes	Voluntary			
5412 Tjelsund	1852 Tjeldsund	Yes	Voluntary	Jan 1, 2020	Yes	
	1913 Skånland	Yes	Voluntary			
5421 Senja	1927 Tranøy	Yes	Voluntary	Jan 1, 2020	Yes	
	1928 Torsken	Yes	Forced			
	1929 Berg	Yes	Voluntary			
	1931 Lenvik	No	Voluntary			

Note: This table catalogues all municipal mergers in Norway from 2017 to 2020, during which the total number of municipalities decreased from 428 to 356. It lists both the new and old municipalities by name and their official identifying numbers in the 'post-reform municipality' and 'pre-reform municipality' columns, respectively. The 'referendum' column indicates if a consultative referendum was held in the pre-reform municipality, while the 'participation' column denotes whether the merger was voluntary or mandated by the national government. The 'effective from' column specifies the date when the new municipality officially came into effect.

Table B.2 – Municipality-level descriptive statistics on election results.

Panel A: Full sample

	2015		2017		2019	
	Running (%)	Vote share (%)	Running (%)	Vote share (%)	Running (%)	Vote share (%)
Socialist Left Party (SV)	63.6 %	3.5 %	100.0 %	4.6 %	67.7 %	4.7 %
Labor Party (Ap)	98.6 %	32.1 %	100.0 %	26.3 %	97.8 %	27.9 %
Center Party (Sp)	90.0 %	18.6 %	100.0 %	21.1 %	96.3 %	26.4 %
Liberal Party (V)	74.1 %	5.1 %	100.0 %	2.6 %	62.4 %	2.8 %
Christian Democratic Party (KrF)	68.2 %	5.8 %	100.0 %	4.8 %	62.9 %	4.4 %
Conservative Party (H)	88.8 %	16.7 %	100.0 %	19.7 %	87.4 %	14.4 %
Progress Party (FrP)	71.0 %	7.3 %	100.0 %	15.7 %	69.9 %	6.5 %
Other parties	55.4 %	3.5 %	100.0 %	7.3 %	59.6 %	5.3 %
Local lists	30.8 %	5.4 %			34.8 %	7.0 %
Joint lists	9.1 %	2.0 %			4.8 %	0.6 %
Number of observations	428	428	425	425	356	356

Panel B: Merger sample

	2015		2017		2019	
	Running (%)	Vote share (%)	Running (%)	Vote share (%)	Running (%)	Vote share (%)
Socialist Left Party (SV)	67.0 %	3.4 %	100.0 %	4.5 %	94.7 %	5.3 %
Labor Party (Ap)	100.0 %	29.1 %	100.0 %	23.7 %	100.0 %	25.7 %
Center Party (Sp)	89.7 %	16.2 %	100.0 %	17.1 %	100.0 %	19.9 %
Liberal Party (V)	83.5 %	6.4 %	100.0 %	3.2 %	92.1 %	4.2 %
Christian Democratic Party (KrF)	85.6 %	7.5 %	100.0 %	5.7 %	97.4 %	5.1 %
Conservative Party (H)	94.8 %	20.5 %	100.0 %	23.6 %	100.0 %	18.5 %
Progress Party (FrP)	78.4 %	8.7 %	100.0 %	16.8 %	100.0 %	9.1 %
Other parties	55.7 %	3.2 %	100.0 %	7.5 %	92.1 %	10.2 %
Local lists	26.8 %	3.8 %			26.3 %	2.0 %
Joint lists	3.1 %	1.0 %			0.0 %	0.0 %
Number of observations	98	98	98	98	38	38

Note: This table reports descriptive statistics for all municipalities (Panel A) and the merger sample (Panel B) in recent local (2015, 2019) and parliamentary (2017) elections. For each election held in the 2015–2019 period, we report the percentage of municipalities where the party is running and the average vote share obtained for each party (unconditional on running). There are sometimes multiple "other parties", "local lists" and "joint lists" running in a municipality. In such cases we aggregate the electoral support within each category.

Table B.3 – Two-way frequency table of local party membership and 2017 votes.

	2017 Vote Group							
Members	1	2	3	4	5	6	7	Total
$1-10$	9	8	2	3	0	2	0	24
$11-20$	14	28	26	3	1	0	0	72
$21-50$	0	36	126	46	3	2	0	213
$51-100$	0	0	51	88	33	0	1	173
$101-200$	1	0	8	28	48	9	0	94
$201-500$	0	0	0	5	9	31	2	47
> 500	0	0	0	0	0	3	9	12
Total	24	72	213	173	94	47	12	635

Note: This table reports the local parties' 2019 membership against their 2017 votes. The data on membership is from the 2019 Survey on Municipal Parties and Local Lists, which asks local party leaders to report their party's approximate membership using the categories reported in the leftmost column. We group the parties' number of 2017 votes into categories matching the number of observations in each of the membership categories, resulting in cutoffs at 64, 162, 538, 1326, 3440 and 11123 votes. We report data on all local parties in the survey, regardless of their merger status. For post-merger parties, we aggregate the votes of the pre-mergers. Post-mergers which included split pre-mergers are excluded. The spearman rank correlation between the two variables is 0.75.

Table B.4 – Main results with a cubic polynomial fit.

	Safe				Contested			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Size	1.962	1.906	1.898	1.766	1.401	1.141	0.954	0.877
	(0.265)	(0.378)	(0.455)	(0.523)	(0.196)	(0.334)	(0.318)	(0.319)
$Size^2$	-3.570	-3.780	-3.613	-3.343	-1.656	-1.465	-1.160	-1.048
	(0.705)	(0.897)	(0.955)	(1.123)	(0.512)	(0.743)	(0.712)	(0.724)
$Size^3$	2.455	2.701	2.563	2.373	1.172	1.240	1.064	0.997
	(0.488)	(0.640)	(0.669)	(0.795)	(0.337)	(0.458)	(0.447)	(0.466)
No. of elected in prev. council			0.016	0.017			0.016	0.017
			(0.011)	(0.011)			(0.006)	(0.007)
Mayor in prev. council			-0.041	-0.040			-0.023	-0.023
			(0.050)	(0.051)			(0.034)	(0.034)
Dist. to municipal center (in hours)			0.010	0.012			-0.010	-0.006
			(0.073)	(0.082)			(0.045)	(0.050)
Population urban share			-0.162	-0.170			-0.022	-0.017
			(0.071)	(0.092)			(0.051)	(0.062)
Female candidate share				0.074				0.002
				(0.072)				(0.066)
Young candidate share				0.062				0.057
				(0.142)				(0.107)
Highly educated candidate share				-0.027				-0.030
				(0.092)				(0.055)
Local party FE	NO	YES	YES	YES	NO	YES	YES	YES
Mean of outcome variable	0.384	0.384	0.384	0.394	0.384	0.384	0.384	0.394
Observations	658	658	658	642	658	658	658	642
Clusters	38	38	38	38	38	38	38	38
R-squared	0.46	0.48	0.49	0.50	0.74	0.75	0.76	0.76

Note: Columns (1) and (5) provide the results from a cubic polynomial regression of a faction's share of list positions the faction's share of a party's votes. In columns (2) and (6), we add local party fixed effects. In columns (3) and (7), we control for several faction-level covariates. 'No. of elected in prev. council' refers to the number of a faction's elected politicians in the pre-merger council (2015–2019) who are running for election in 2019. 'Mayor in prev. council' is a dummy variable indicating whether a faction had the mayor in the pre-merger council (2015–2019) who is running for election in 2019. 'Dist. to municipal center (in hours)' represents the driving distance from the town hall of each pre-merger municipality to the town hall of the largest pre-merger municipality in the merger. 'Population urban share' measures the share of the population in the pre-merger municipality that lived in an urban area as of 2019. In columns (4) and (8), we control for the share of factions' female, highly educated, and young (under 30) candidates on the list as a proportion of their total number of candidates.

Table B.5 – Faction size coefficients across non-advantaged rank deciles.

	Safe	1	2	3	4	5	6	7	8	9	10
Size	0.560	0.791	0.743	0.785	0.856	0.731	0.852	0.842	0.805	0.879	0.833
	(0.053)	(0.050)	(0.051)	(0.055)	(0.053)	(0.049)	(0.063)	(0.049)	(0.071)	(0.054)	(0.049)
Local party FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	658	624	652	658	647	658	639	653	645	658	658
Clusters	38	38	38	38	38	38	38	38	38	38	38
R-squared	0.46	0.51	0.47	0.50	0.54	0.48	0.50	0.53	0.47	0.57	0.52

Note: The table provides the results from regressions of 'Size' from Equation 8 on faction's share of different non-advantage rank decile positions (indicated by the column header), corresponding to Figure 4. The results from a regression of 'Size' on faction's share of safe positions (Table 1, column 2) is included on the left for reference.

Table B.6 – Faction size coefficients across non-advantaged rank deciles, with controls.

	Safe	1	2	3	4	5	6	7	8	9	10
Size	0.591	0.855	0.692	0.721	0.912	0.757	0.804	0.843	0.835	0.816	0.892
	(0.102)	(0.083)	(0.085)	(0.112)	(0.104)	(0.076)	(0.132)	(0.111)	(0.113)	(0.123)	(0.105)
No. of elected in prev. council	0.022	0.000	0.027	0.018	-0.007	0.027	0.019	0.008	0.019	0.017	0.025
	(0.011)	(0.010)	(0.009)	(0.013)	(0.013)	(0.009)	(0.013)	(0.015)	(0.013)	(0.012)	(0.013)
Mayor in prev. council	-0.045	-0.003	-0.004	-0.046	0.015	-0.039	0.024	0.012	-0.112	-0.087	-0.052
	(0.050)	(0.067)	(0.060)	(0.073)	(0.072)	(0.054)	(0.073)	(0.071)	(0.074)	(0.068)	(0.071)
Dist. to municipal center (in hours)	0.045	0.046	0.091	-0.068	0.002	0.004	0.088	-0.025	0.102	-0.019	0.078
	(0.077)	(0.083)	(0.061)	(0.110)	(0.093)	(0.066)	(0.054)	(0.089)	(0.058)	(0.115)	(0.070)
Population urban share	-0.136	-0.063	0.067	-0.088	-0.066	-0.227	0.112	-0.101	-0.012	-0.000	-0.161
	(0.079)	(0.106)	(0.092)	(0.089)	(0.135)	(0.107)	(0.160)	(0.126)	(0.100)	(0.110)	(0.129)
Local party FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	658	624	652	658	647	658	639	653	645	658	658
Clusters	38	38	38	38	38	38	38	38	38	38	38
R-squared	0.47	0.51	0.48	0.50	0.54	0.50	0.51	0.53	0.48	0.58	0.53

Note: The table provides the results from regressions of 'Size' from Equation 8 on faction's share of different non-advantage rank decile positions (indicated by the column header), corresponding to Figure B.9. The results from a regression of 'Size' on faction's share of safe positions (Table 1, column 3) is included on the left for reference. We control for several faction-level covariates. 'No. of elected in prev. council' refers to the number of a faction's elected politicians in the pre-merger council 2015-2019 who are running for election in 2019. 'Mayor in prev. council' is a dummy variable indicating whether a faction had the mayor in the pre-merger council 2015-2019 who is running for election in 2019. 'Dist. to municipal center (in hours)' represents the driving distance from the town hall of each pre-merger municipality to the town hall of the largest pre-merger municipality in the merger. 'Population urban share' measures the share of the population in the pre-merger municipality that lived in an urban area as of 2019.

Table B.7 – Summary statistics by merger status.

	All municipalities		Non-Merging municipalities		Merging municipalities		Difference	OLS
	Mean	SD	Mean	SD	Mean	SD	Diff. in mean	Coef (Std.)
Economic characteristics								
Population	12,598	40,066	11,727	43,240	15,343	27,791	3,616	0.07
Children (share age 0 to 5)	0.061	0.012	0.059	0.012	0.065	0.010	0.006***	0.04
Young (share age 6 to 15)	0.119	0.016	0.117	0.016	0.125	0.016	0.008***	0.01
Elderly (share 66+)	0.197	0.038	0.201	0.038	0.183	0.038	-0.018***	-0.15
Women (share)	0.490	0.010	0.489	0.011	0.491	0.009	0.002	0.02
Unemployed (share)	0.016	0.006	0.016	0.006	0.016	0.005	0.001	-0.01
Grants per capita (in 1000 NOK)	35.339	13.095	36.195	13.475	32.640	11.470	-3.555**	0.15*
Tax from income and wealth (1000 NOK per capita)	28.387	6.595	28.501	7.151	28.027	4.413	-0.474	-0.12*
Per capita property tax (residential)	1.399	1.272	1.489	1.338	1.115	0.989	-0.374***	-0.06
Per capita property tax (commercial)	2.611	6.082	2.826	6.336	1.933	5.175	-0.893	0.01
Area (km^2)	720.581	854.101	832.402	931.610	368.001	363.453	-464.401***	-0.14***
Distance to nearest neighboring municipality (minutes)	27.589	24.079	30.407	26.349	18.701	10.821	-11.707***	-0.17***
Political leadership								
Socialist left party mayor	0.002	0.050	0.003	0.057	0.000	0.000	-0.003	-0.08
Labor party mayor	0.474	0.500	0.502	0.501	0.388	0.490	-0.114**	Ref.
Center party mayor	0.226	0.419	0.249	0.433	0.153	0.362	-0.096**	-0.01
Liberal party mayor	0.015	0.121	0.010	0.098	0.031	0.173	0.021	0.07
Christian democratic party mayor	0.037	0.189	0.032	0.177	0.051	0.221	0.019	0.02
Conservative party mayor	0.167	0.374	0.117	0.321	0.327	0.471	0.210***	0.19***
Progress party mayor	0.012	0.110	0.010	0.098	0.020	0.142	0.011	0.04
Other mayor	0.066	0.249	0.078	0.268	0.031	0.173	-0.047**	-0.02
N	407		309		98			

Note: The table reports statistics for all municipalities, our merging sample and non-merging municipalities in 2019, before the mergers were effective. Wave 1 mergers and municipalities involved in mergers that included split municipalities are excluded from our sample, and not part of the table. The second column from the right reports the difference between non-merging and merging municipalities. and the last column reports standardized coefficient estimates from an OLS regression of merger status on all variables in the table. 'Grants per capita' reports central government grants to the municipality in 1000 NOK per capita. 'Tax from income and wealth' reports the municipalities' income from tax on income, wealth and natural resources in 1000 NOK per capita. 'Per capita property tax (residential)' reports the revenues from residential property taxation in 1000 NOK per capita, and 'Per capita property tax (commercial)' from commercial property taxation. 'Distance to nearest neighboring municipality' reports the driving distance from the town hall of the municipality to the nearest town hall of a neighboring municipality in minutes.

Table B.8 – Main results split by voluntary status of merger.

Panel A: Voluntary

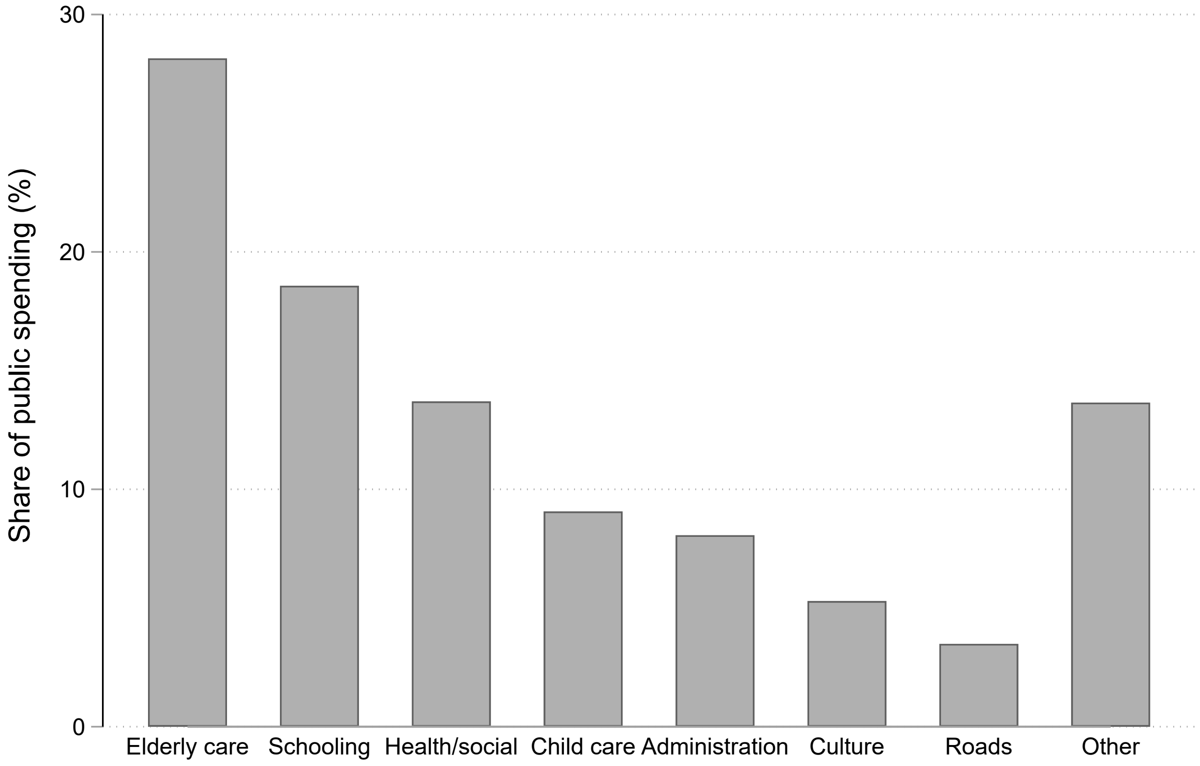
	Safe				Contested			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Size	0.597	0.560	0.623	0.568	0.811	0.794	0.747	0.718
	(0.506 0.688)	(0.422 0.699)	(0.311 0.936)	(0.197 0.939)	(0.767 0.855)	(0.727 0.861)	(0.597 0.898)	(0.546 0.891)
	[0.502 0.688]	[0.454 0.661]	[0.382 0.927]	[0.252 0.907]	[0.766 0.853]	[0.743 0.842]	[0.631 0.876]	[0.573 0.866]
No. of elected in prev. council			0.023	0.021			0.019	0.019
			(-0.005 0.051)	(-0.005 0.048)			(0.001 0.037)	(0.001 0.037)
			[0.001 0.047]	[-0.000 0.043]			[0.005 0.035]	[0.006 0.035]
Mayor in prev. council			-0.014	-0.010			-0.021	-0.021
			(-0.142 0.113)	(-0.148 0.128)			(-0.105 0.062)	(-0.107 0.064)
			[-0.109 0.085]	[-0.111 0.097]			[-0.083 0.045]	[-0.084 0.045]
Dist. to municipal center (in hours)			0.090	0.079			-0.016	-0.021
			(-0.200 0.381)	(-0.234 0.393)			(-0.101 0.068)	(-0.121 0.078)
			[-0.040 0.540]	[-0.063 0.560]			[-0.056 0.167]	[-0.127 0.182]
Population urban share			-0.134	-0.154			-0.043	-0.053
			(-0.340 0.072)	(-0.431 0.123)			(-0.163 0.076)	(-0.211 0.105)
			[-0.316 0.022]	[-0.412 0.061]			[-0.138 0.070]	[-0.181 0.084]
Female candidate share				0.142				0.094
				(-0.069 0.352)				(-0.074 0.262)
				[-0.005 0.327]				[-0.031 0.242]
Young candidate share				0.239				0.084
				(-0.238 0.716)				(-0.262 0.430)
				[-0.161 0.694]				[-0.138 0.462]
Highly educated candidate share				-0.008				-0.040
				(-0.343 0.327)				(-0.204 0.123)
				[-0.242 0.258]				[-0.162 0.072]
Local party FE	NO	YES	YES	YES	NO	YES	YES	YES
Mean of outcome variable	0.426	0.426	0.426	0.436	0.426	0.426	0.426	0.436
Observations	465	465	465	454	465	465	465	454
Clusters	30	30	30	30	30	30	30	30
R-squared	0.41	0.43	0.45	0.46	0.74	0.75	0.76	0.76

Panel B: Involuntary

	Safe				Contested			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Size	0.603	0.557	0.540	0.505	0.733	0.702	0.684	0.630
	(0.481 0.726)	(0.401 0.713)	(0.275 0.804)	(0.321 0.690)	(0.580 0.887)	(0.495 0.909)	(0.390 0.977)	(0.483 0.777)
	[0.488 0.757]	[0.418 0.716]	[0.298 0.868]	[0.338 0.751]	[0.584 0.915]	[0.473 0.908]	[0.453 1.090]	[0.514 0.810]
No. of elected in prev. council			0.021	0.022			0.014	0.019
			(-0.027 0.068)	(-0.024 0.068)			(-0.014 0.042)	(-0.003 0.041)
			[-0.017 0.079]	[-0.014 0.077]			[-0.015 0.051]	[-0.002 0.057]
Mayor in prev. council			-0.161	-0.156			-0.025	-0.040
			(-0.342 0.019)	(-0.336 0.024)			(-0.236 0.185)	(-0.256 0.175)
			[-0.415 -0.045]	[-0.401 -0.051]			[-0.219 0.175]	[-0.229 0.163]
Dist. to municipal center (in hours)			-0.029	-0.015			0.056	0.070
			(-0.134 0.077)	(-0.142 0.113)			(-0.073 0.186)	(-0.085 0.225)
			[-0.163 0.305]	[-0.203 0.331]			[-0.078 0.454]	[-0.087 0.445]
Population urban share			-0.162	-0.143			0.043	0.074
			(-0.348 0.024)	(-0.377 0.092)			(-0.200 0.285)	(-0.190 0.338)
			[-0.375 0.158]	[-0.379 0.200]			[-0.234 0.331]	[-0.254 0.392]
Female candidate share				0.005				-0.134
				(-0.274 0.283)				(-0.424 0.157)
				[-0.316 0.273]				[-0.389 0.088]
Young candidate share				-0.014				0.075
				(-0.383 0.355)				(-0.277 0.428)
				[-0.321 0.296]				[-0.285 0.400]
Highly educated candidate share				-0.004				-0.013
				(-0.110 0.101)				(-0.159 0.134)
				[-0.099 0.093]				[-0.146 0.160]
Local party FE	NO	YES	YES	YES	NO	YES	YES	YES
Mean of outcome variable	0.285	0.285	0.285	0.293	0.285	0.285	0.285	0.293
Observations	193	193	193	188	193	193	193	188
Clusters	8	8	8	8	8	8	8	8
R-squared	0.41	0.43	0.45	0.45	0.66	0.67	0.68	0.70

Note: Columns (1) and (5) provide the results from simple linear regressions of a faction's share of list positions on the faction's share of the party's votes. Columns (2) and (6) represent separate regressions based on Equation (8). In columns (3) and (7), we control for several faction-level covariates. 'No. of elected in prev. council' refers to the number of a faction's elected politicians in the pre-merger council (2015–2019) who are running for election in 2019. 'Mayor in prev. council' is a dummy variable indicating whether a faction had the mayor in the pre-merger council (2015–2019) who is running for election in 2019. 'Dist. to municipal center (in hours)' represents the driving distance from the town hall of each pre-merger municipality to the town hall of the largest pre-merger municipality in the merger. 'Population urban share' measures the share of the population in the pre-merger municipality that lived in an urban area as of 2019. In columns (4) and (8), we control for the share of factions' female, highly educated, and young (under 30) candidates on the list as a proportion of their total number of candidates. Panel A displays the results for post-mergers where all pre-merger municipalities agreed to the merger, and Panel B for post-mergers where at least one pre-merger was forced to participate in the merger. Standard 95% confidence intervals are provided in parentheses, and 95% confidence intervals based on wild cluster bootstrapping in brackets (Cameron, Gelbach and Miller, 2008).

Figure B.1 – Average spending on different sectors among municipalities in 2020.



Note: The figure plots the municipality average spending on different sectors, as percentage share of their total public spending in 2020. Spending is the sum of gross current expenditures and gross investment for the various sectors.

Figure B.2 – Ballot of the Labor Party in Ålesund municipality.

Kommunestyre- og fylkestingsvalget 2019

Valglister med kandidater

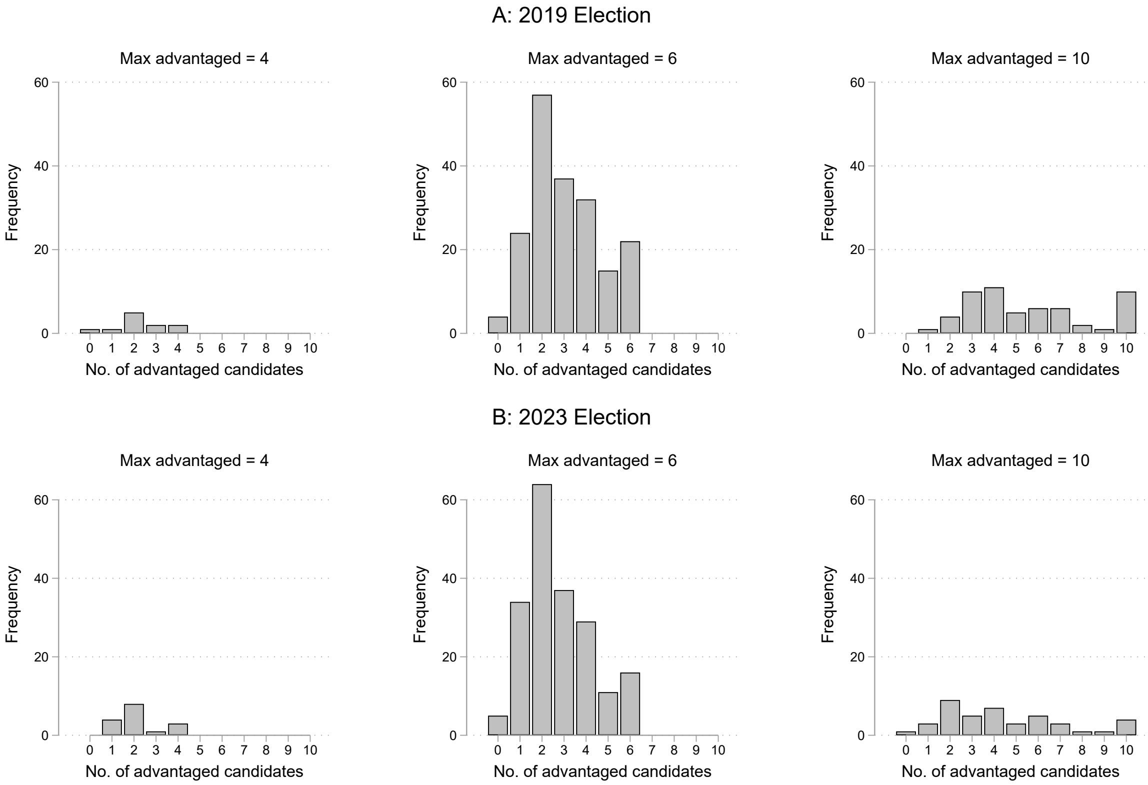
Kommunestyrevalget 2019 i Ålesund

Valglistens navn: Arbeiderpartiet **Status: Godkjent av valgstyret**

Kandidatnr.	Navn	Fødselsår	Bosted	Stilling
1	**Eva Mariann Vinje Aurdal**	**1957**	Larsgården	
2	**Geir Ove Leite**	**1968**	Skodje	
3	**Åse Kristin Ask Bakke**	**1996**	Harøy	
4	**Svein Rune Johannessen**	**1960**	Blindheim	
5	**Siv Katrin Ulla**	**1972**	Vatne	
6	**Daniel Pour Asgharian**	**1999**	Åse	
7	**Torill Andersen Leganger**	**1958**	Ørskog	
8	**Emil Inge Korsnes**	**1958**	Brattvåg	
9	**Tove Nygård**	**1971**	Skodje	
10	**Sindre Muren Nakken**	**1972**	Hessa	
11	Arne Abelseth	1957	Ørskog	
12	Sigmund Haugen	1969	Harøy	
13	Anne Berit Støyva Emblem	1973	Emblem	
14	Henriette Bryn	1959	Hatlane	
15	Jack Narve Sæther	1963	Ellingsøy	
16	Inger Lise Andreassen	1951	Lepsøy	
17	Bjørn Kåre Høistad	1953	Longva	
18	Nora Morken Farstad	1958	Larsgården	
19	Roy Andre Haugen	1993	Harøy	
20	Ove Lars Økland	1949	Nørvøy	
21	Kristina Mari Tubbene Roald	2000	Skodje	
22	Njål Bele	1979	Spjelkavik	
23	Bjørn Sverre Steffensen	1964	Hessa	
24	Arild Aanes	1952	Ørskog	
25	Anne-Marie Aasen	1963	Aspøy	
26	Siv Kathrin Alnes	1971	Skodje	
27	Svein Inge Alnes	1951	Flisnes	
28	Carmen Alvestad	1960	Ørskog	
29	Petter Jørgen Andersen	1953	Hatlane	
30	Trond Gran Andreassen	1963	Vatne	
31	Eli Støylen Brandal	1963	Skarbøvik	
32	Karoline Huldal Hauglid	1985	Skodje	

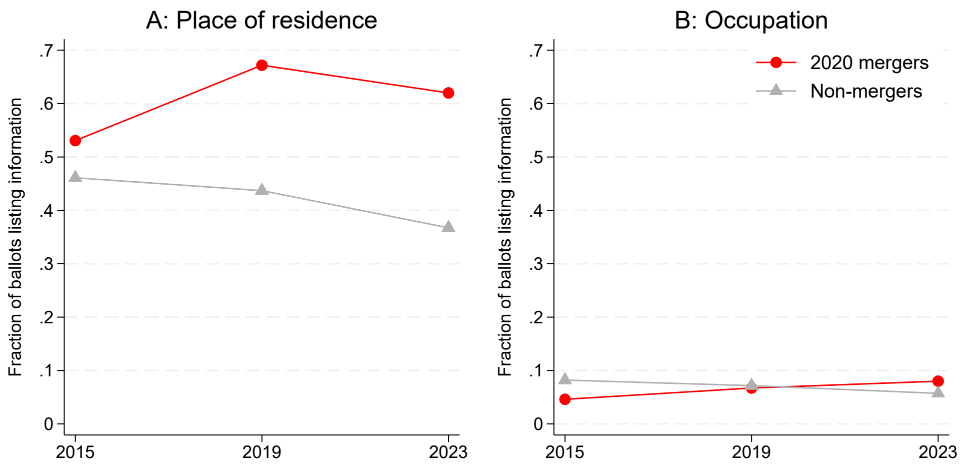
Note: The figure displays a snippet of the official ballot for the Labor Party (Arbeiderpartiet) in the 2019 municipal election. The actual ballot runs to candidate rank 83. The ballot lists each candidate's name, birth year and place of residence (Bosted), but not their occupation (Stilling).

Figure B.3 – Number of advantaged candidates split by the maximum allowed.



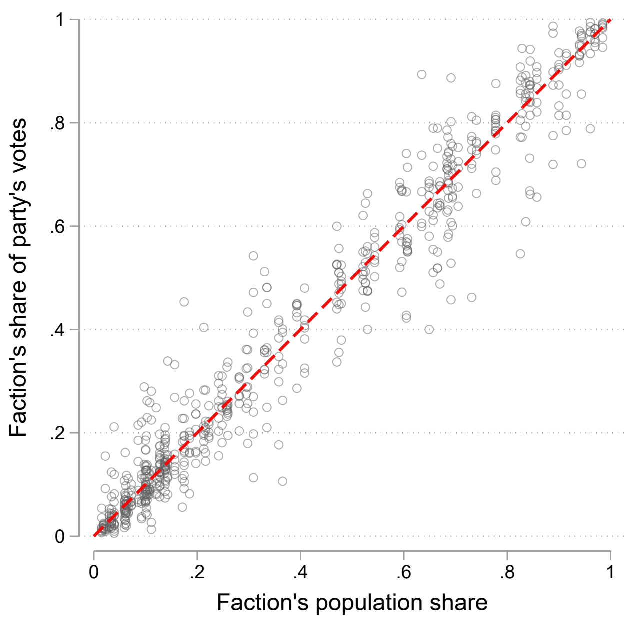
Note: The figures display histograms showing the distribution of lists in the 2019 (Panel A) and 2023 (Panel B) elections based on the number of advantaged candidates they contain, grouped by the maximum number allowed. The left figures represent lists with a maximum of 4 advantaged candidates, the middle figures those with a maximum of 6, and the right figures those with a maximum of 10.

Figure B.4 – Information listed about candidates on the ballot over time.



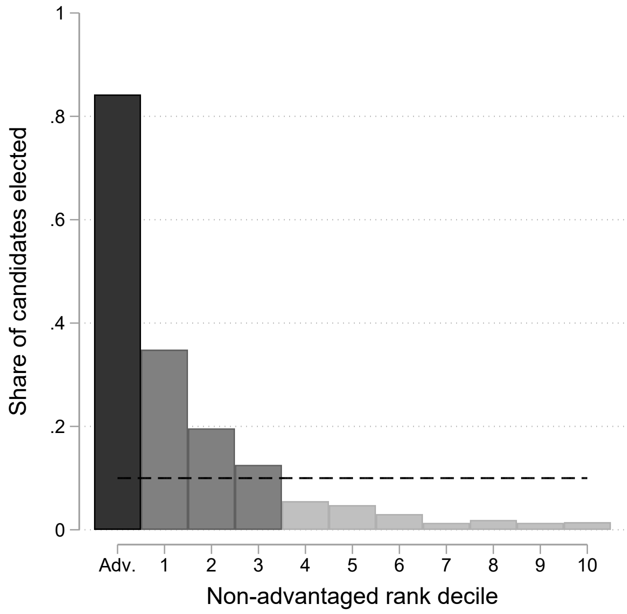
Note: Panel A displays the fraction of ballots listing information about candidates' place of residence over time, split by merger status. Similarly, Panel B displays the fraction of ballots listing information about candidates' occupation. The red lines represent the lists in our sample, while the gray lines represent the lists of the same parties in non-merging municipalities. Lists in municipalities which were merged between 2015 and 2019 are excluded. The data is from the Norwegian Directorate of Elections (https://www.valg.no/om-valg/valgdata/lister-og-kandidater).

Figure B.5 – Scatter plot of different measures of faction size.



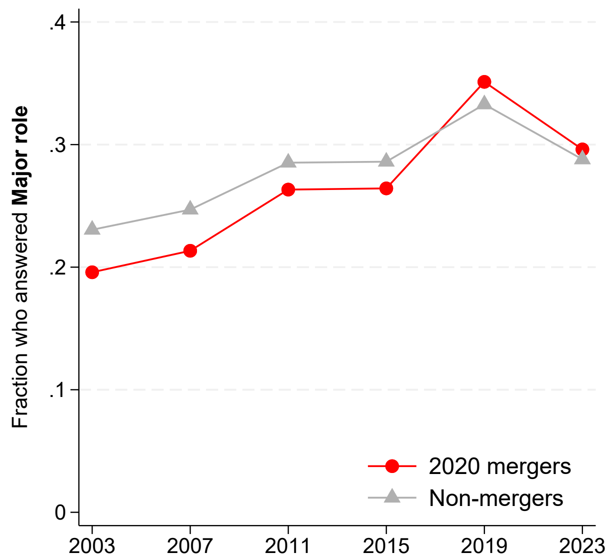
Note: The figure plots each faction's size, measured by their share of the party's votes (y axis) and their population share (x axis), both relative to the other factions in the post-merger party. A faction's share of the party's votes is calculated according to equation 7. A faction's population share is calculated as its share of the sum of the populations in the municipalities involved in a merger. The red line corresponds to the function $x = y$.

Figure B.6 – Share of elected candidates by non-advantaged rank decile.



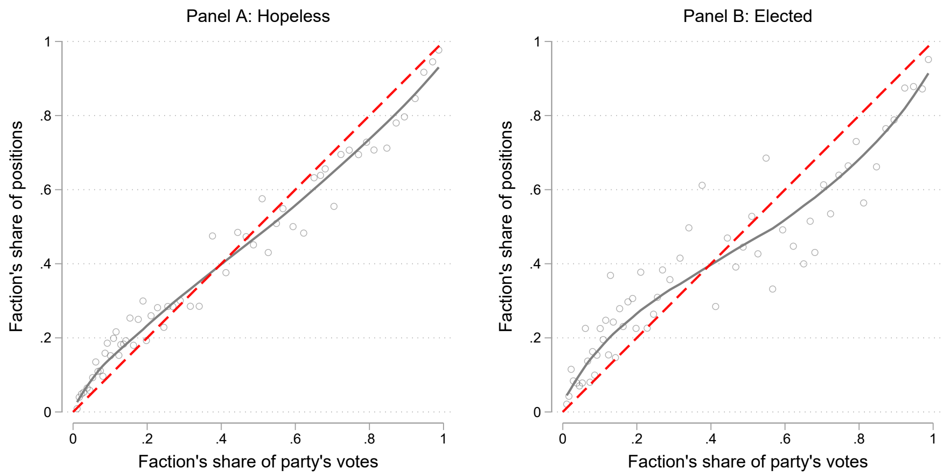
Note: The figure plots the share of elected candidates by their rank decile after the advantaged candidates have been excluded from the list. For reference, the share of elected candidates with the advantaged is included in the left of the plot, labeled 'Adv.'.

Figure B.7 – Survey evidence on perceived election stakes



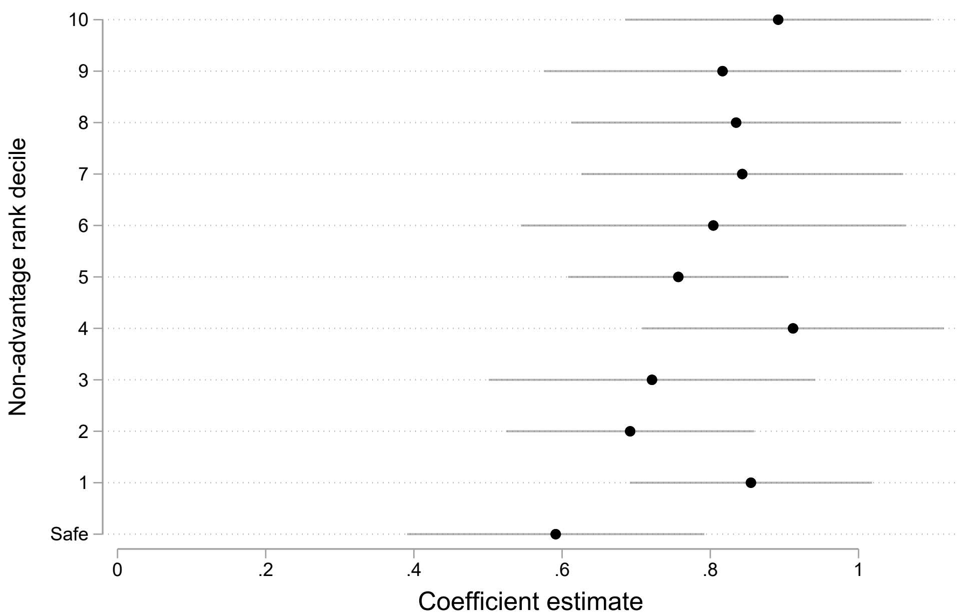
Note: The figure plots the fraction of survey respondents answering the outcome of the election will play major role for what happens in their municipality over the next four years. The other response categories are 'some role', 'no role' and 'don't know'. Results are displayed for respondents living in a municipality in our merger sample (N=3759) and in a non-merging municipality (N=10370). Respondents in municipalities which were merged between 2002 and 2018 are excluded. The data is from the Norwegian Local Election Survey.

Figure B.8 – Allocation of hopeless list positions and elected candidates according to faction size.



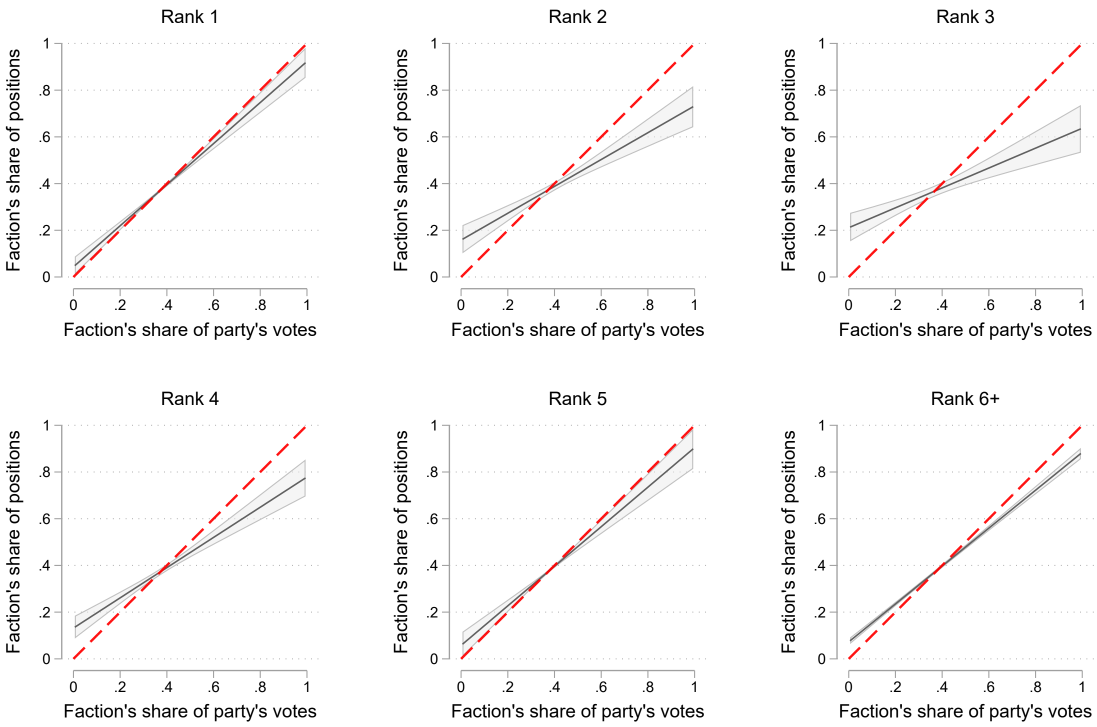
Note: Panel A displays factions' share of 'hopeless' positions in the 2019 local elections as a function of the faction's share of the party's votes in the 2017 national elections, categorized into 60 equal-sized bins. Panel B similarly plots factions' share of elected candidates in the 2019 local elections as a function of the faction's share of the party's votes in the 2017 national elections. The black lines are obtained using locally weighted scatter plot smoothing (lowess). The red lines represents the proportional allocation.

Figure B.9 – Coefficient of faction size on faction's share of different non-advantaged rank decile positions, with controls.



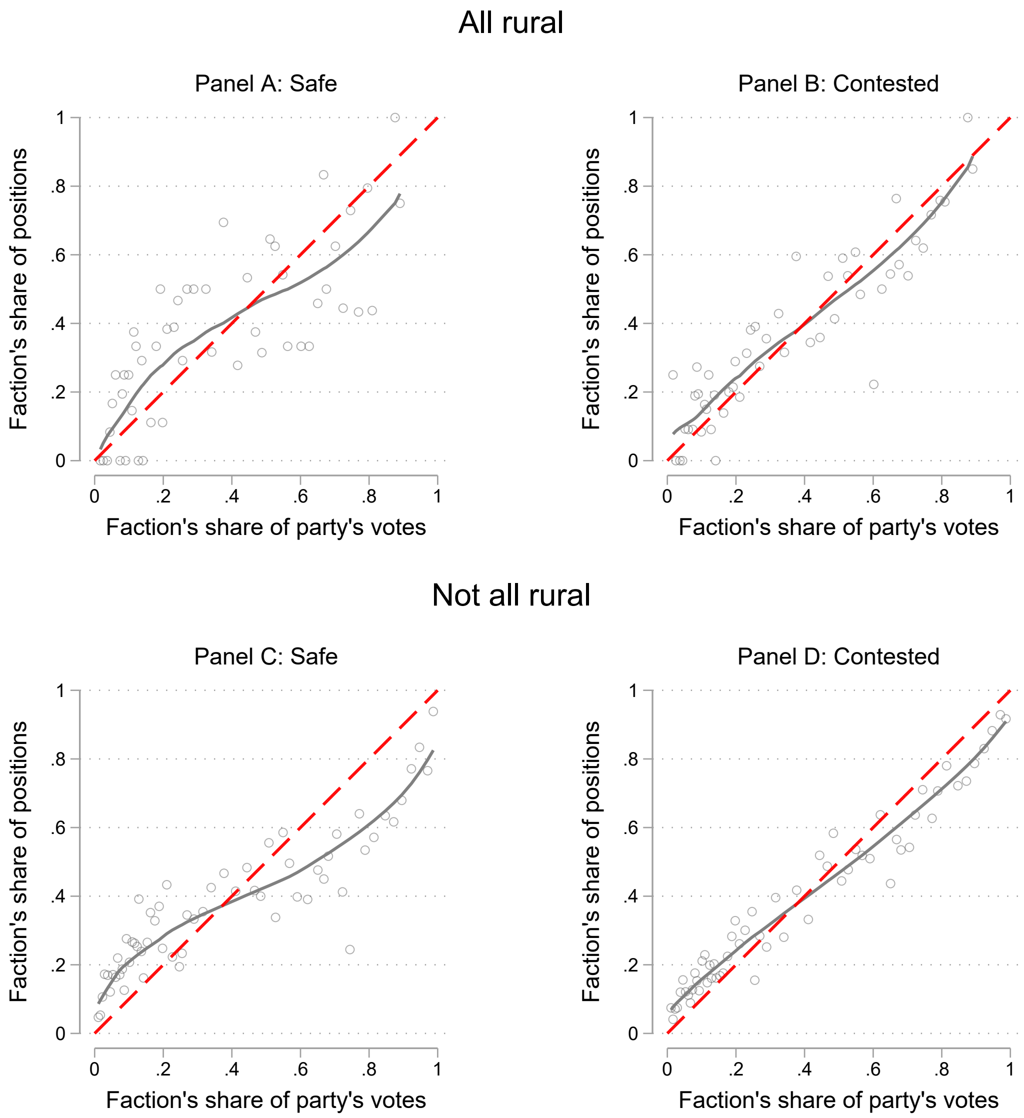
Note: The figure plots estimates of the coefficient of 'Size' from Equation 8 on faction's share of different non-advantage rank decile positions. We control for a faction's number of incumbent councilors on the list, whether the faction has an incumbent mayor running for election, geographic distance between the faction and the new municipal center and the faction's population urban share. The estimated coefficient of 'Size' on faction's share of safe positions (Table 1, column 3) is included at the bottom for reference.

Figure B.10 – Allocation of different rank positions according to faction size.



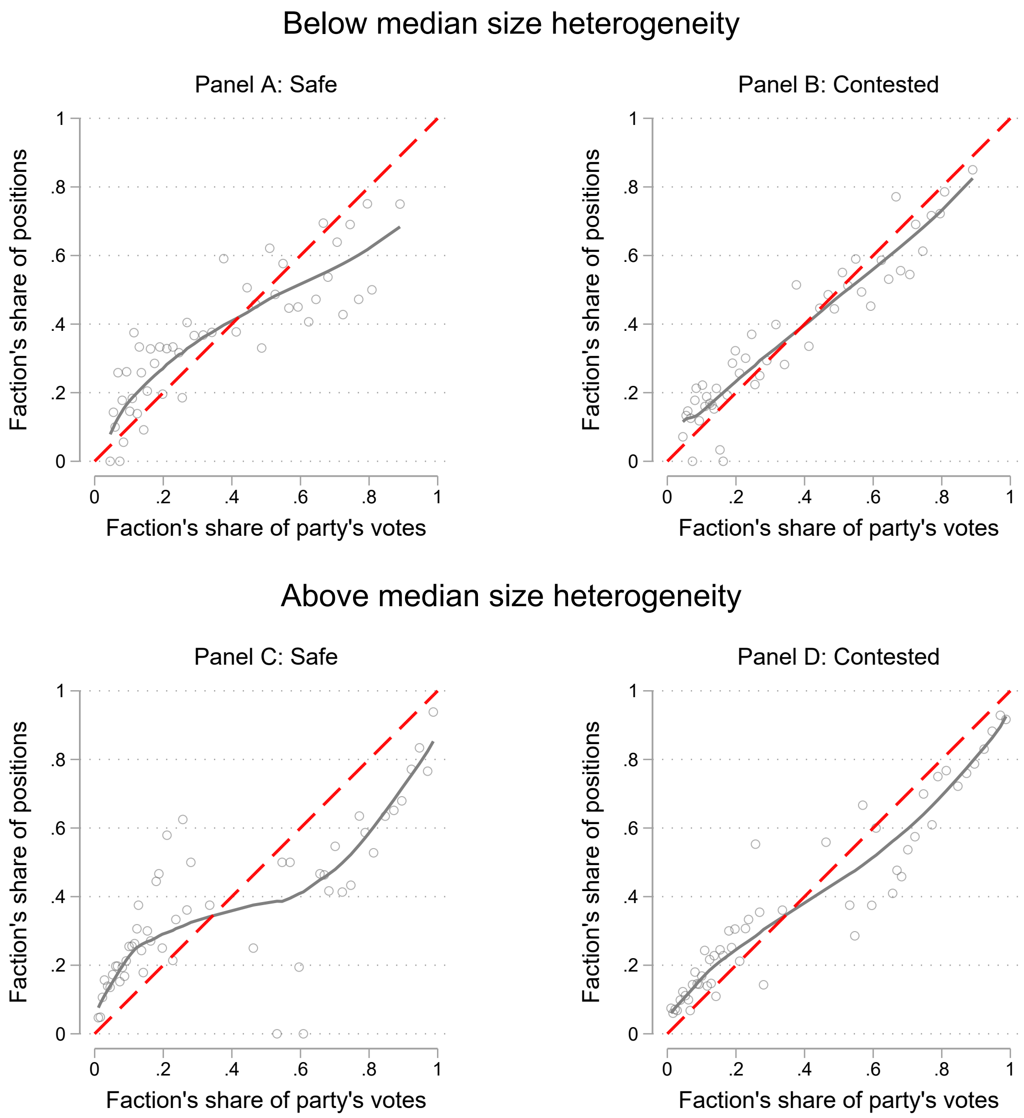
Note: The figures plot factions' predicted share of different rank positions as a function of the faction's share of the party's votes in the 2017 national elections. The black line with a 95% confidence interval in gray is obtained through a linear regression. The red line represents the proportional allocation.

Figure B.11 – Allocation of list positions, split by urban/rural composition of merger partners.



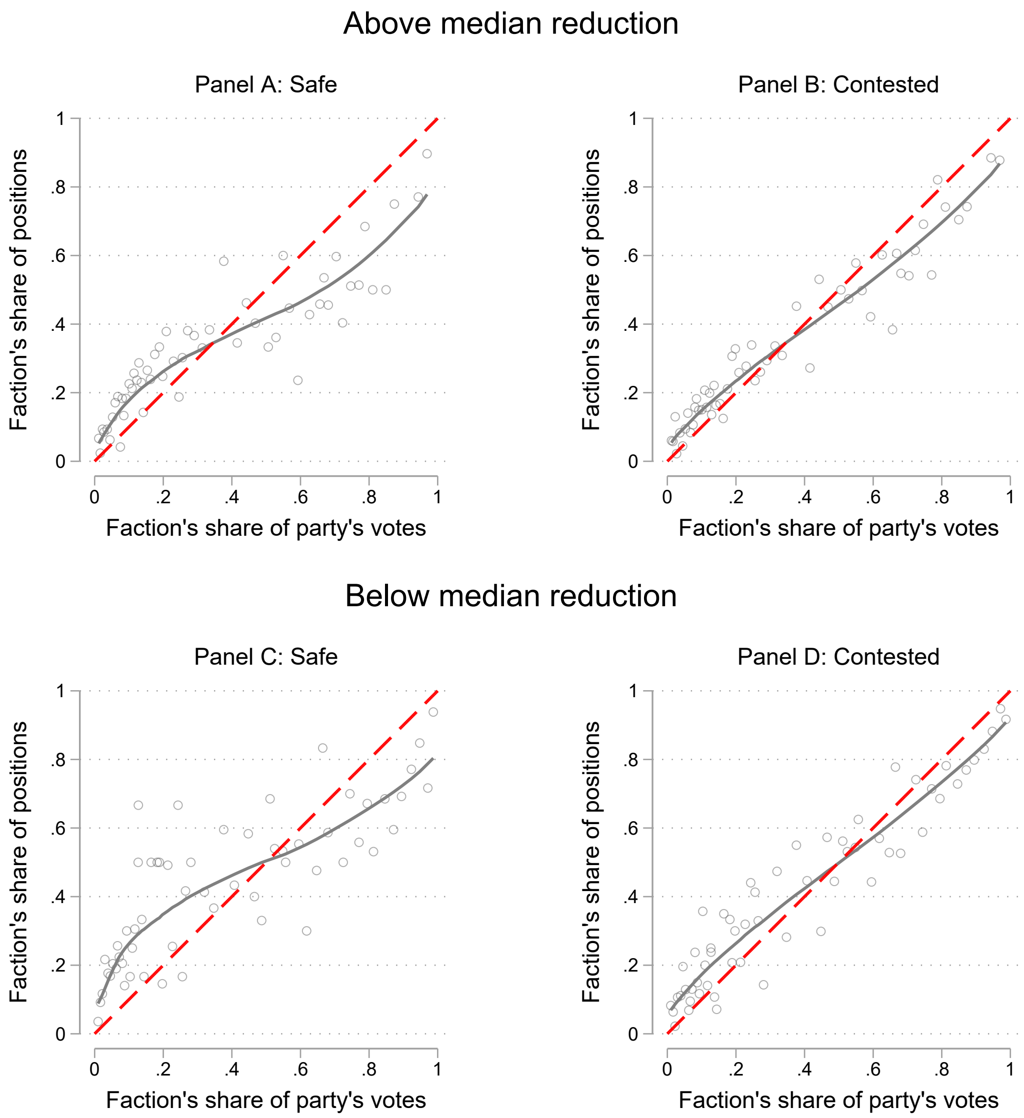
Note: The figure displays the allocation of 'safe' (panels A and C) and 'contested' (panels B and D) list positions in the 2019 election as a function of the faction's share of the party's votes in the 2017 national elections, categorized into 60 equal-sized bins. In panels A and B are results for mergers consisting of only rural pre-merger municipalities. Panels C and D display results for mergers consisting not only of rural pre-merger municipalities. A pre-merger municipality's rural status is determined based on Statistics Norway's Centrality Index (https://www.ssb.no/befolkning/folketall/artikler/sentralitetsindeksen). Municipalities in centrality class 5 and 6 are classified as rural, while municipalities in classes 1 through 4 are classified as non-rural. The black line is obtained using locally weighted scatter plot smoothing (lowess). The red line represents the proportional allocation.

Figure B.12 – Allocation of list positions, split by size heterogeneity.



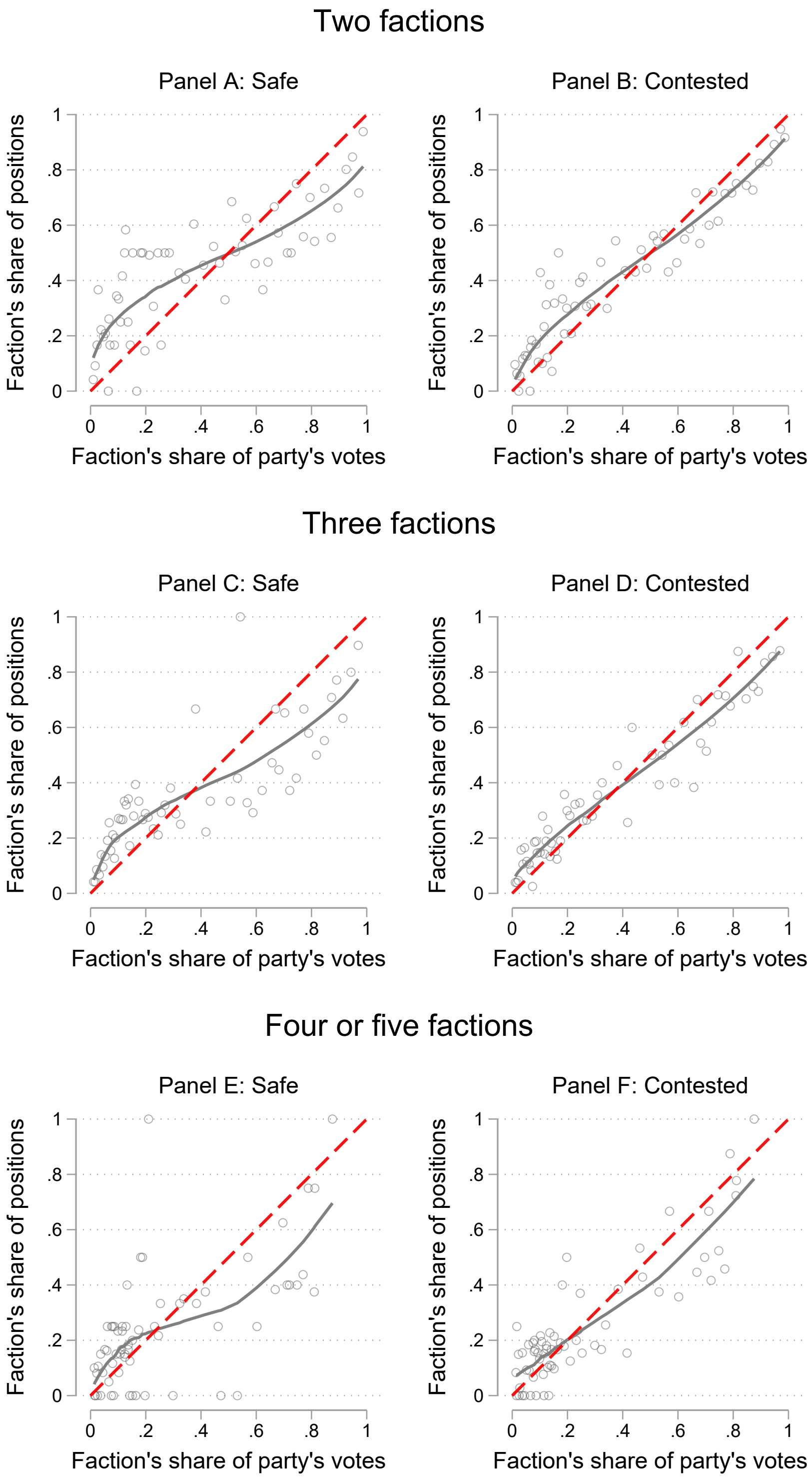
Note: The figure displays the allocation of 'safe' (panels A and C) and 'contested' (panels B and D) list positions in the 2019 election as a function of the faction's share of the party's votes in the 2017 national elections, categorized into 60 equal-sized bins. Size heterogeneity for each party is measured as the pre-merger population of the largest faction divided by the population of the second-largest faction. Panels A and B show results for parties with below-median size heterogeneity, while panels C and D show results for parties with above-median size heterogeneity. The black line is obtained using locally weighted scatter plot smoothing (lowess). The red line represents the proportional allocation.

Figure B.13 – Allocation of list positions, split by reductions in council size post merger.



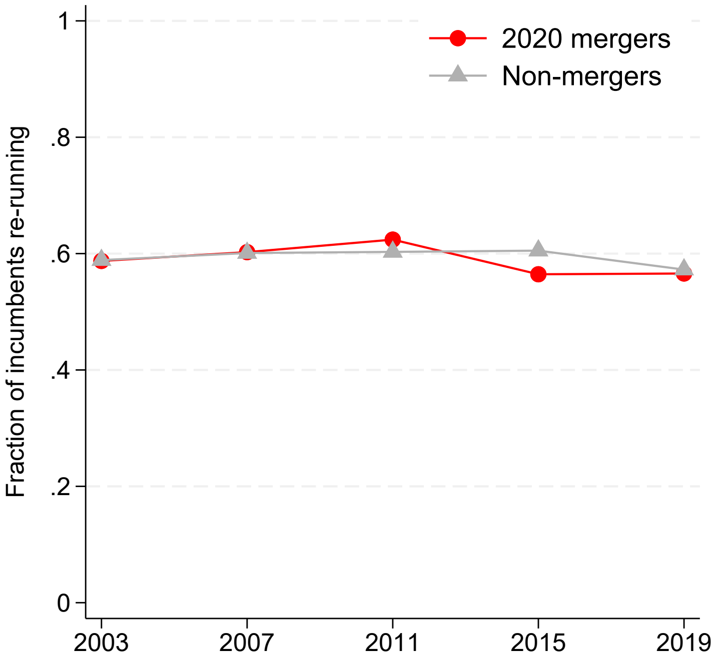
Note: The figure displays the allocation of 'safe' (panels A and C) and 'contested' (panels B and D) list positions in the 2019 election as a function of the faction's share of the party's votes in the 2017 national elections, categorized into 60 equal-sized bins. Panels A and B show results for mergers with a below-median reduction in council size. Panels C and D show results for those with an above-median reduction. The percentage reduction in council size is calculated as the decrease from the total number of pre-merger seats to the post-merger number of seats. The solid line is a lowess smoothed fit of the data. The black line is obtained using locally weighted scatter plot smoothing (lowess). The red line represents the proportional allocation.

Figure B.14 – Allocation of list positions, split by number of factions.



Note: The figure displays the allocation of 'safe' (panels A, C and E) and 'contested' (panels B, D and F) list positions in the 2019 election as a function of the faction's share of the party's votes in the 2017 national elections, categorized into 60 equal-sized bins. In panels A and B are results for parties consisting of two factions, panels C and D for parties consisting of three factions, and panels E and F for parties consisting of four or five factions. The black line is obtained using locally weighted scatter plot smoothing (lowess). The red line represents the proportional allocation.

Figure B.15 – Fraction of incumbents re-running in the next election.



Note: The figure displays the fraction of politicians elected in year t who re-ran for the same party in year $t + 4$. In 2015, the figure then displays the fraction of elected politicians who ran for election in 2019.